

# 30 Books in 1

# GIST OF NCERT

## Classwise

## Subjectwise

## Class 6-12

# UPSC/IAS

A Comprehensive Summary  
History | Geography | Polity | Economy



# Preface

## Why this book?

NCERT Books help an aspirant to develop a critical view and to develop conceptual understanding of all subjects. There are almost 30+ Books for Social Studies from Class 6-12 which have relevance from exam point of view. Students find it difficult to grasp the subject matter in a comprehensive way as it spread over more than 30 books. In this book the subject matter is arranged sequentially CLASSWISE & SUBJECTWISE so that a student can comprehend the NCERT books in a quick and efficient way. Further, content has been summarised proportionately as its relevance from UPSC point of view. Important Tables, Pictures, Charts and Important terms are included in each chapter.

## Why NCERT Books Important?

1. Questions are asked directly in Prelims as well as in Mains from NCERT Books.
2. NCERT content is designed and structured in a way that it provoke thought in reader's mind, it develops curiosity towards subject matter, it develops a questioning mind and finally it develops a solution oriented approach and constructive criticism in reader's mind.
3. Language in NCERT books is simple, lucid and critical in a way that it indirectly prepare a student's writing skills for Mains Exam.
4. NCERT books provide the base for conceptual understanding which is highly useful to understand the higher and complex issues in society.

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# NCERT Class 6

## History (Our Pasts – I)

### GIST OF NCERT Classwise 30 Books

#### Chapter 1

#### What, Where, How And When?

There are several things we can find out about our past, like what people ate, the kinds of clothes they wore and the types of houses in which they lived.

#### Where did people live?

People have lived along the banks of this river for several hundred thousand years. Some of the earliest people who lived here were skilled gatherers, — that is, people who gathered their food. They knew about the vast wealth of plants in the surrounding forests, and collected roots, fruits and other forest produce for their food. They also *hunted* animals. Sulaiman and Kirthar hills are some of the areas where women and men first began to *grow* crops such as wheat and barley about 8000 years ago are located here. People also began *rearing animals* like sheep, goat, and cattle, and lived in *villages*. Garo hills in north-east were some of the other areas where agriculture developed. The places where rice was first grown are to the north of the Vindhya.

*Indian Subcontinent: It includes the present countries of India, Pakistan, Bangladesh, Nepal, Bhutan and Sri Lanka and the neighbouring countries of Afghanistan, Iran, China and Myanmar. South Asia is often called a subcontinent because although it is smaller than a continent, it is very large, and is separated from the rest of Asia by seas, hills and mountains.*

About 4700 years ago, some of the earliest *cities* flourished on the banks of river Indus and its tributaries. Later, about 2500 years ago, cities developed on the banks of the Ganga and its tributaries, and along the seacoasts. In ancient times the area along Son and to the south of the Ganga was known as Magadha. Its rulers were very powerful, and set up a *large kingdom*. Kingdoms were set up in other parts of the country as well.

#### Names of the land

Two of the words we often use for our country are India and Bharat. The word India comes from the Indus, called Sindhu in Sanskrit. The Iranians and the Greeks who came through the northwest about 2500 years ago and were familiar with the Indus, called it the Hindos or the Indos, and the land to the east of the river was called India. The name Bharata was used for a group of people who lived in the north-west, and who are mentioned in the Rigveda, the earliest composition in Sanskrit (dated to about 3500 years ago). Later it was used for the country.

#### Finding out about the past

There are several ways of finding out about the past. One is to search for and read books that were written long ago. These are called manuscripts, because they were written by hand (this comes from the Latin word 'manu', meaning hand). These were usually written on

palm leaf, or on the specially prepared bark of a tree known as the birch, which grows in the Himalayas. Manuscripts were often preserved in temples and monasteries. These books dealt with all kinds of subjects: religious beliefs and practices, the lives of kings, medicine and science. Besides, there were epics, poems, plays. Many of these were written in Sanskrit, others were in Prakrit (languages used by ordinary people) and Tamil.

We can also study . These are writings on relatively hard surfaces such as stone or metal.

Sometimes, kings got their orders inscribed so that people could see, read and obey them. There are other kinds of inscriptions as well, where men and women (including kings and queens) recorded what they did. For example, kings often kept records of victories in battle.

There were many other things that were made and used in the past. Those who study these objects are called *archaeologists*. They study the remains of buildings made of stone and brick, paintings and sculpture. They also explore and *excavate* (dig under the surface of the earth) to find tools, weapons, pots, pans, ornaments and coins. Some of these objects may be made of stone, others of bone, baked clay or metal. Objects that are made of hard, imperishable substances usually survive for a long time.

#### What is source? What is its importance to the historians?

The word 'source' refers to the information found from the manuscripts, inscriptions, coins and monuments. It helps the historians in the reconstruction of our past. These sources give a lot of information about the kings, their coronation, the extent of their empires, the battles they fought, their welfare measures, etc. because they kept records of all what they did.

#### What do AD and BC stand for?

(i) AD stands for two Latin words, '*Anno Domini*', meaning 'in the year of the Lord' (*i.e.*, Christ). The year 2007, also written as AD 2007, means 2007 years after the birth of Christ.

(ii) BC stands for 'Before Christ', meaning before the birth of Christ. For example, a time period written as 200 BC means 200 years before the birth of Christ. BC runs into countdown format as 10., 9., 8., 7., ..... 1.. upto the time of Jesus Christ's birth and after his birth it started to run in today's date format, *i.e.*, 1., 2., 3., ..., onwards.

#### Elsewhere

We have seen that inscriptions are written on hard surfaces. Many of these were written several hundreds of years ago. All inscriptions contain both scripts and *languages*. Languages which were used, as well as scripts, have changed over time. So how do scholars understand what was written? This can be done through a process known as *decipherment*.

One of the most famous stories of decipherment comes

from Egypt, a country in north Africa where there were kings and queens about 5000 years ago. Rosetta is a town on the north coast of Egypt, and here an inscribed stone was found, which contained inscriptions in three different languages and scripts (Greek, and two forms of Egyptian). Scholars who could read Greek figured out that the names of kings and queens were enclosed in a little frame, called a cartouche. They then placed the Greek and the Egyptian signs side by side, and identified the sounds for which the Egyptian letters stood. As you can see, a lion stood for L, and a bird for A. Once they knew what the letters stood for, they could read other inscriptions as well.

**Important Terms:** **Skilled Gatherers:** People who gathered their food and who have lived on the banks of river Narmada for several hundred thousand years. **Tributaries:** Smaller rivers which flow into a large river. **Archaeologists:** People who study old objects made and used in the past. **Historians:** Scholars who study about the past. **Excavation:** Digging under the surface of the earth. **Manuscripts:** Books written by hand long ago. **Inscriptions:** Old writings on hard surfaces such as metal or stone.

**Important Dates:** **8000 years ago:** The beginning of agriculture. **4700 years ago:** The first cities on banks of river Indus. **2500 years ago:** Cities settled in Ganga Valley, a massive kingdom in Magadha. **2000 AD/CE:** The Modern time began.

## Chapter 2 On The Trail Of The Earliest People

### Quick Review

- **Palaeolithic:** This term refers to the age where we find a large number of stone tools. It extends from 2 million years ago to about 12,000 years ago and is divided into Lower, Middle and Upper Palaeolithic.
- **Mesolithic:** This period extends from 10,000 years ago to about 12,000 years ago. Stone tools found during this period were generally tiny and were called Microliths.
- **Neolithic:** This was the period that dates back to about 10,000 years ago and is therefore, known as the New Stone Age.
- **The Earliest People:** They were hunter-gatherers, a name derived from the way they collected food. They hunted animals, collected berries and fruits and gathered nuts, stalks and eggs. To hunt, they needed to move constantly and to gather plant products, they needed knowledge about the edibility of plants and change of season.
- **Division of Labour:** Both men and women performed activities like stone-making, hunting and gathering collectively.

### How do we know about hunter-gatherers?

Archaeologists have found some of the things hunter-gatherers made and used out of stone, wood and bone, of which stone tools have survived best.

### Choosing a place to live in

Look at Map below. All the places marked with red triangles are *sites* from which archaeologists have found evidence of hunter-gatherers. Many sites were located near sources of water, such as rivers and lakes.

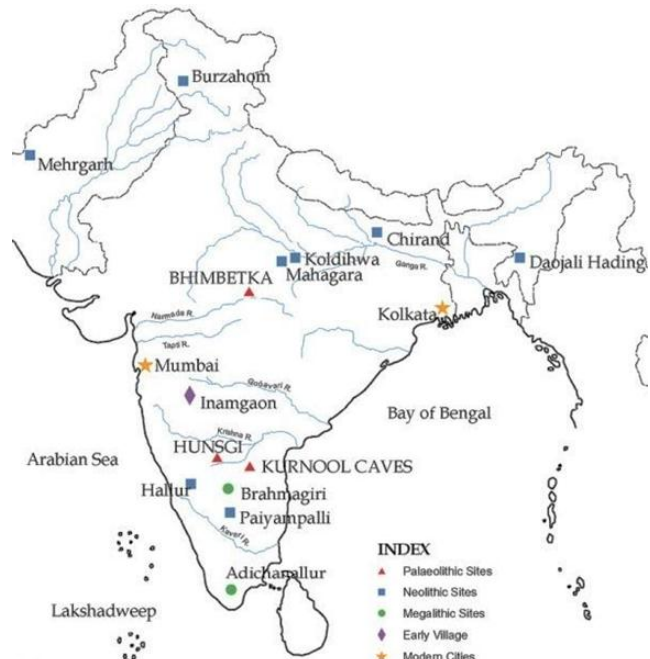
As stone tools were important, people tried to find places where good quality stone was easily available. Places where stone was found and where people made tools are known as *factory* sites.

How do we know where these factories were? Usually, we find blocks of stone, tools that were made and

perhaps discarded because they were not perfect, and chips of waste stone left behind at these sites.

Sometimes, people lived here for longer spells of time. These sites are called *habitation-cum-factory* sites.

**Sites** are places where the remains of things (tools, pots, buildings etc.) were found. These were made, used and left behind by people. These may be found on the surface of the earth, buried under the earth, or sometimes even under water.



### Main features of the paintings of Bhimbetka?

*Bhimbetka is located in present-day Madhya Pradesh. Some sites, known as habitation sites, are places where people lived. These include caves and rock shelters such as of Bhimbetka*

- The rock shelters of Bhimbetka are decorated with picture writings, depicting the life and times of pre-historic cave dwellers.
- These paintings mirror the difficulties of the native man's struggle with life and also his accomplishments.
- These paintings also show wild animals drawn with great accuracy.
- Religious symbols those were popular with these pre-historic artists also adorn the walls of these shelters.
- The paintings are often superimposed, which reveal that the surfaces were used by different people at different times.

*People chose these natural caves because they provided shelter from the rain, heat and wind. Natural caves and plateau. These rock shelters are close to the Narmada rock shelters which are found in the Vindhyas and the Deccan valley. Can you think of why people chose to live here?*

### Finding out about fire

In the Kurnool caves traces of ash have been found here. This suggests that people were familiar with the use of fire. Fire could have been used for many things: as a source of light, to cook meat, and to scare away animals.

### A changing environment

Around 12,000 years ago, there were major changes in the climate of the world, with a shift to relatively warm conditions. In many areas, this led to the development of grasslands. This in turn led to an increase in the number of deer, antelope, goat, sheep and cattle, i.e. animals that survived on grass. Those who hunted these animals now followed them, learning about their food



habits and their breeding seasons. It is likely that this helped people to start thinking about herding and rearing these animals themselves. Fishing also became important. This was also a time when several grain bearing grasses, including wheat, barley and rice grew naturally in different parts of the subcontinent. Men, women and children probably collected these grains as food, and learnt where they grew, and when they ripened. This may have led them to think about growing plants on their own.

### Ostriches in India

Ostriches were found in India during the Palaeolithic period. Large quantities of ostrich egg shells were found at Patne in Maharashtra. Designs were engraved on some pieces, while beads were also made out of them. Where do we find ostriches today?

### A closer look – Hungsi

A number of early Palaeolithic sites were found at Hungsi. At some sites, a large number of tools, used for all sorts of activities, were found. These were probably habitation-cum factory sites. In some of the other, smaller sites, there is evidence to suggest that tools were made. Some of the sites were close to springs. Most tools were made from limestone, which was locally available.

**Important Terms:** **Hunter-gatherer:** The earliest people who hunted animals and gathered food for their meal. **Site:** Local position. **Habitation:** Residence. **Factory:** A workshop. **Palaeolithic:** Earliest period of history. **Mesolithic:** Middle stone age. **Microliths:** Small and tiny stone tools. **Important Dates:** **20, 00, 000 years ago:** Palaeolithic Age. **12, 000 years to 10, 000 years ago:** Mesolithic Age. **Present time:** Neolithic Age.

## Chapter 3 Gathering To Growing Food

### The beginnings of farming and herding

We have seen in Chapter 2 that the climate of the world was changing, and so were plants and animals that people used as food. Men, women and children probably observed several things: the places where edible plants were found, how seeds broke off stalks, fell on the ground, and new plants sprouted from them. Perhaps they began looking after plants — protecting them from birds and animals so that they could grow and the seeds could ripen. In this way people became farmers.

Women, men and children could also attract and then tame animals by leaving food for them near their shelters. The first animal to be tamed was the wild ancestor of the dog. Later, people encouraged animals that were relatively gentle to come near the camps where they lived. These animals such as sheep, goat, cattle and also the pig lived in herds, and most of them ate grass. Often, people protected these animals from attacks by other wild animals. This is how they became herders. Can you think of any reasons why the dog was perhaps the first animal to be tamed?

**Domestication** is the name given to the process in which people grow plants and look after animals. People select plants and animals for domestication. Amongst animals, those that are relatively gentle are selected for breeding. As a result, gradually, domesticated animals and plants become different from wild animals and plants. Domestication was a gradual process that took place in many parts of the world. It began about 12, 000 years ago. Virtually all the plant and

animal produce that we use as food today is a result of domestication. Some of the earliest plants to be domesticated were wheat and barley. The earliest domesticated animals include sheep and goat.

### A new way of life

If you plant a seed, you will notice that it takes some time to grow. When people began growing plants, it meant that they had to stay in the same place for a long time looking after the plants, watering, weeding, driving away animals and birds — till the grain ripened. As grain had to be stored for both food and seed, people had to think of ways of storing it. In many areas, they began making large clay pots, or wove baskets, or dug pits into the ground. Do you think hunter-gatherers would have made and used pots? Give reasons for your answer.

### ‘Storing’ animals

Animals multiply naturally. Besides, if they are looked after carefully, they provide milk, which is an important source of food, and meat, whenever required. In other words, animals that are reared can be used as a ‘store’ of food.

### Finding out about the first farmers and herders

To find out whether ancient sites were settlements of farmers and herders, scientists study evidence of plants and animal bones. One of the most exciting finds includes remains of burnt grain. (These may have been burnt accidentally or on purpose). Scientists can identify these grains, and so we know that a number of crops were grown in different parts of the subcontinent. They can also identify the bones of different animals.

### Grain and Bones Sites

Wheat, barley, sheep, goat, cattle Mehrgarh (in present day -Pakistan)

1. Rice, fragmentary animal bones Koldihwa (in present-day Uttar Pradesh)
2. Rice, cattle (hoof marks on clay surface)
3. Mahagara (in present-day Uttar Pradesh)
4. Wheat and lentil Gufkral (in present-day Kashmir)
5. Wheat and lentil, dog, cattle, sheep, goat, buffalo, Burzahom (in present-day Kashmir)
6. Wheat, green gram, barley, buffalo, ox Chirand (in present-day Bihar)
7. Millet, cattle, sheep, goat, pig Hallur (in present-day Andhra Pradesh)
8. Black gram, millet, cattle, sheep, pig Paiyampalli (in present-day Andhra Pradesh)
9. These are just some of the sites from which grain and bones have been found

### Towards a settled life

Archaeologists have found traces of huts or houses at some sites. For instance, in Burzahom (in present-day Kashmir) people built pit-houses, which were dug into the ground, with steps leading into them. Stone tools have been found from many sites as well. Many of these are different from the earlier Palaeolithic tools and that is why they are called *Neolithic*. These include tools that were polished to give a fine cutting edge, and mortars and pestles used for grinding grain and other plant produce. At the same time, tools of the Palaeolithic types continued to be made and used, and remember, some tools were also made of bone. Many kinds of earthen pots have also been found. These were sometimes decorated, and were used for storing things. Did things change everywhere and all at once? Not quite. In many areas, men and women still continued to hunt and gather food, and elsewhere people adopted farming and herding slowly, over several thousand



years.

### What about other customs and practices?

Archaeology does not tell us directly about these. Scholars have studied the lives of present-day farmers who practise simple agriculture. They have also studied the lives of herders. Many of these farmers and herders live in groups called *tribes*. Scholars find that they follow certain customs and practices that may have existed earlier as well.

### Tribes

In case of tribes, usually two to three generations live together in small settlements or villages. Most families are related to one another and groups of such families form a tribe.

- Members of a tribe follow occupations such as hunting, gathering, farming, herding and fishing. Usually, women do most of the agricultural work. Men usually lead large herds of animals in search of pasture. Children often look after small flocks. Both women and men make pots, baskets, tools and huts. They also take part in singing, dancing and decorating their huts.
- Some men are regarded as leaders. They may be old and experienced, or young, brave warriors, or priests. Old women are respected for their wisdom and experience.
- Tribes have rich and unique cultural traditions, including their own language, music, stories and paintings. They also have their own gods and goddesses.
- What makes tribes different from many other societies you will be studying about is that land, forests, grasslands and water are regarded as the wealth of the entire tribe, and everybody shares and uses these together. There are no sharp differences between the rich and the poor.

### A closer look — (a) Living and dying in Mehrgarh

This site is located in a fertile plain, near the Bolan Pass, which is one of the most important routes into Iran. Mehrgarh was probably one of the places where women and men learnt to grow barley and wheat, and rear sheep and goats for the first time in this area. It is one of the earliest villages that we know about.

Other finds at Mehrgarh include remains of square or rectangular houses. Each house had four or more compartments, some of which may have been used for storage.

When people die, their relatives and friends generally pay respect to them. People look after them, perhaps in the belief that there is some form of life after death. Burial is one such arrangement. Several burial sites have been found at Mehrgarh. In one instance, the dead person was buried with goats, which were probably meant to serve as food in the next world.

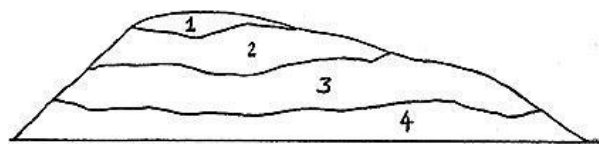
### A closer look — (b) Daojali Hading

Daojali Hading is a site on the hills near the Brahmaputra Valley, close to routes leading into China and Myanmar. Here stone tools, including mortars and pestles, have been found. These indicate that people were probably growing grain and preparing food from it. Other finds include jadeite, a stone that may have been brought from China. Also common are finds of tools made of fossil wood (ancient wood that has hardened into stone), and pottery.

### Earlier and later levels

When archaeologists are digging at an excavation site, how do they know which level is earlier and which is later? Look at the illustration. Suppose people first start living on flat land (layer 4). Over the years, the surface will gradually rise, because people discard waste

material, and generally stay and rebuild houses in the same place. After hundreds of years, this leads to the formation of a mound. So, when this mound is dug up, what is found from the *upper* layers of the mound is generally from a *later* time than what is found from the *lower* layers of the mound, which are older.



### Elsewhere

Turkey is one of the most famous Neolithic sites, Catal Huyuk, was found in Turkey. Several things were brought from great distances — flint from Syria, cowries from the Red Sea, shells from the Mediterranean Sea — and used in the settlement. Remember, there were no carts — most things would have been carried on the backs of pack animals such as cattle or by people.

**Important Terms:** **Herders:** The group of animals of one kind that live and feed together. **Neolithic:** Of the later stone age. **Pots:** A vessel of earthenware (metal or glass). **Tribes:** Distinct class of people. **Burials:** The act or ceremony of putting a dead body into a grave. **Mehrgarh** was situated in a fertile plain, near the Bolan Pass. Here, people learnt to grow barley and wheat. It is one of the earliest villages. Houses here had four or more compartments. Various burial sites have been found in Mehrgarh. **Jadeite** a stone tool have been discovered in Daojali Hading near the Brahmaputra Valley.

**Important Dates:** **About 12, 000 years ago:** Beginning of domestication. **About 10, 000 years ago:** Start of Neolithic Age. **About 8, 000 years ago:** Beginning of settlement at Mehrgarh.

## Chapter 4 In The Earliest Cities



Map: 3 The Earliest Cities in the Subcontinent

**Red Pottery:** Archaeologists have found a set of unique objects in almost all these cities: red pottery painted with designs in black, stone weights, seals, special beads, copper tools, and long stone blades.

**Harappan seal:** The Harappans also made seals out of stone. These are generally rectangular and usually have an animal carved on them. The signs on the top of the seal are part of a script. This is the earliest form of writing known in the subcontinent still not deciphered. Seals may have been used to stamp bags or packets containing goods that were sent from one place to another. Terracotta toys were made of clay.

**Stone weights:** These were made of chert, a kind of stone. These were probably used to weigh precious stones or metals.

**Beads:** Many of these were made out of carnelian, a beautiful red stone. The stone was cut, shaped, polished and finally a hole was bored through the centre so that a string could be passed through it.

**Embroidered cloth:** A stone statue of an important man found from Mohenjodaro shows him wearing an embroidered garment.

**Faience:** Unlike stone or shell, that are found naturally, faience is a material that is artificially produced. A gum was used to shape sand or powdered quartz into an object. The objects were then glazed, resulting in a shiny, glassy surface. The colours of the glaze were usually blue or sea green. Faience was used to make beads, bangles, earrings, and tiny vessels.

### Crafts

Many *crafts persons*, making all kinds of things — either in their own homes, or in special workshops. People were travelling to distant lands or returning with raw materials and, perhaps, stories. Many terracotta toys have been found and children must have played with these. Most of the things that have been found by archaeologists are made of stone, shell and metal, including copper, bronze, gold and silver. Copper and bronze were used to make tools, weapons, ornaments and vessels. Gold and silver were used to make ornaments and vessels. Perhaps the most striking finds are those of beads, weights, and blades. The Harappans also made pots with beautiful black designs. Cotton was probably grown at Mehrgarh from about 7000 years ago. Actual pieces of cloth were found attached to the lid of a silver vase and some copper objects at Mohenjodaro. Archaeologists have also found spindle whorls, made of terracotta and faience. These were used to spin thread.

### In search of raw materials

While some of the raw materials that the Harappans used were available locally, many items such as copper, tin, gold, silver and precious stones had to be brought from distant places.

The Harappans probably got copper from present-day Rajasthan, and even from Oman in West Asia. Tin, which was mixed with copper to produce bronze, may have been brought from present-day Afghanistan and Iran. Gold could have come all the way from present-day Karnataka, and precious stones from present-day Gujarat, Iran and Afghanistan.

### Food for people in the cities

While many people lived in the cities, others living in the countryside grew crops and reared animals. These farmers and herders supplied food to crafts persons, scribes and rulers in the cities. We know from remains of plants that the Harappans grew wheat, barley, pulses, peas, rice, sesame, linseed and mustard.

A new tool, the *plough*, was used to dig the earth for turning the soil and planting seeds. While real ploughs, which were probably made of wood, have not survived, toy models have been found. As this region does not

receive heavy rainfall, some form of *irrigation* may have been used. This means that water was stored and supplied to the fields when the plants were growing. The Harappans reared cattle, sheep, goat and buffalo. Water and pastures were available around settlements. However, in the dry summer months large herds of animals were probably taken to greater distances in search of grass and water. They also collected fruits like *ber*, caught fish and hunted wild animals like the antelope.

### A closer look — Harappan towns in Gujarat

The city of Dholavira was located on Khadir Beyt in the **Rann** of Kutch, where there was fresh water and fertile soil. Unlike some of the other Harappan cities, which were divided into two parts, Dholavira was divided into three parts, and each part was surrounded with massive stone walls, with entrances through gateways. There was also a large open area in the settlement, where public ceremonies could be held. Other finds include large letters of the Harappan script that were carved out of white stone and perhaps inlaid in wood. This is a unique find as generally Harappan writing has been found on small objects such as seals.

The city of Lothal stood beside a tributary of the Sabarmati, in Gujarat, close to the Gulf of Khambat. It was situated near areas where raw materials such as semi-precious stones were easily available. This was an important centre for making objects out of stone, shell and metal. There was also a store house in the city. Many seals and sealings (the impression of seals on clay) were found in this storehouse.

### Layout of the Cities:

- (i) The Harappan cities were divided into two parts: the citadel and the lower town. Walls were fortified with bricks in interlocking patterns.
- (ii) Streets were laid out straight and cut each other at right angles.
- (iii) Drains ran parallel to each other and had covers. Wells were also constructed.
- (iv) The citadel was located at a higher level and had special buildings.
- (v) The Great Bath in Mohenjodaro was a tank used for bathing rituals.
- (vi) Kalibangan and Lothal had fire altars where sacrifices may have been performed. *A dockyard also found at Lothal, where boats and ships came in from the sea and through the river channel. Goods were probably loaded and unloaded here.* A building that was found here was probably a workshop for making beads: pieces of stone, half made beads, tools for bead making, and finished beads have all been found here.
- (vii) The lower town was the residential area where houses were one or two storeys high and built around a corridor.

### The mystery of the end

Around 3900 years ago we find the beginning of a major change. People stopped living in many of the cities. Writing, seals and weights were no longer used. Raw materials brought from long distances became rare. In Mohenjodaro, we find that garbage piled up on the streets, the drainage system broke down, and new, less impressive houses were built, even over the streets. Why did all this happen? We are not sure. Some scholars suggest that the rivers dried up. Others suggest that there was deforestation. This could have happened because fuel was required for baking bricks, and for smelting copper ores. Besides, grazing by large herds of cattle, sheep and goat may have destroyed the green

cover. In some areas there were floods. But none of these reasons can explain the end of all the cities. Flooding, or a river drying up would have had an effect in only some areas.

It appears as if the rulers lost control. In any case, the effects of the change are quite clear. Sites in Sind and west Punjab (present-day Pakistan) were abandoned, while many people moved into newer, smaller settlements to the east and the south. New cities emerged about 1400 years later.

### Elsewhere

Most of Egypt is a dry desert, except for the lands along the river Nile. Around 5000 years ago, kings ruled over Egypt. These kings sent armies to distant lands to get gold, silver, ivory, timber, and precious stones. They also built huge tombs, known as pyramids. When they died, the bodies of kings were preserved and buried in these pyramids. These carefully preserved bodies are known as 'mummies'. A large number of objects were also buried with them. These included food and drink, clothes, ornaments, utensils, musical instruments, weapons and animals. Sometimes even serving men and women were buried with the rulers. These are amongst the most elaborate burials known in world history.

Do you think kings would have needed these things after death?

**Important Terms:** **Citadel:** A strong place of arms. **Scribe:** A person who can write. **Crafts person:** A mechanic or artisan. **Metal:** A hard, usually shining substance. **Seal:** An impression. **Specialist:** Person devoting himself to a single branch of his profession. **Raw material:** Unripe or uncooked material. **Plough:** Implement for furrowing and turning up the soil. **Weights and Beads:** Stone weights made of chert were used for weighing precious metals or stones. **Beads** made of carnelian, a red stone, have been found which were used in ornaments. An artificially produced substance called faience was also used to make bangles and beads. **Important Dates:** **About 7,000 years ago:** Cotton cultivation started in Mehrgarh. **About 4,700 years ago:** Beginning of cities. **About 3,900 years ago:** Beginning of end of the established cities. **About 2,500 years ago:** The emergence of new cities.

## Chapter 5 What Books And Burials Tell Us

### One of the oldest books in the world

There are four Vedas— the Rigveda, Samaveda, Yajurveda and Atharvaveda. The oldest Veda is the Rigveda, composed about 3500 years ago. The Rigveda includes more than a thousand hymns, called *sukta* or "well-said". These hymns are in praise of various gods and goddesses. Three gods are especially important: Agni, the god of fire; Indra, a warrior god; and Soma, a plant from which a special drink was prepared. These hymns were composed by sages (*rishis*). Most of the hymns were composed, taught and learnt by men. A few were composed by women. The books we use are written and printed. The Rigveda was recited and *heard* rather than read. It was written down several centuries after it was first composed, and printed less than 200 years ago.

Some of the hymns in the Rigveda are in the form of dialogues. This is part of one such hymn, a dialogue between a sage named Vishvamitra, and two rivers, (Beas and Sutlej) that were worshipped as goddesses. Other rivers, especially the Indus and its other tributaries, and the Sarasvati, are also named in the

hymns. The Ganga and Yamuna are named only once.

### Sanskrit and other languages

Sanskrit is part of a *family* of languages known as Indo-European. Some Indian languages such as Assamese, Gujarati, Hindi, Kashmiri and Sindhi; Asian languages such as Persian and many European languages such as English, French, German, Greek, Italian and Spanish belong to this family. They are called a family because they originally had words in common. Take the words '*matr*' (Sanskrit), '*ma*' (Hindi) and '*mother*' (English). Do you notice any similarities?

Other languages used in the subcontinent belong to different families. For instance, those used in the north-east belong to the Tibeto-Burman family; Tamil, Telugu, Kannada and Malayalam belong to the Dravidian family; and the languages spoken in Jharkhand and parts of central India belong to the Austro-Asiatic family.

### Cattle, horses and chariots

There are many prayers in the Rigveda for cattle, children (especially sons), and horses. Horses were yoked to chariots that were used in battles, which were fought to capture cattle. Battles were also fought for land, which was important for pasture, and for growing hardy crops that ripened quickly, such as barley. Some battles were fought for water, and to capture people. Some of the wealth that was obtained was kept by the leaders, some was given to the priests and the rest was distributed amongst the people. Some wealth was used for the performance of yajnas or sacrifices in which offerings were made into the fire. These were meant for gods and goddesses. Offerings could include ghee, grain, and in some cases, animals.

Most men took part in these wars. There was no regular army, but there were assemblies where people met and discussed matters of war and peace. They also chose leaders, who were often brave and skilful warriors.

### Words to describe people

There are two groups who are described in terms of their work — the priests, sometimes called *brahmins*, who performed various rituals and the *rajas*. These *rajas* were not like the ones you will be learning about later. They did not have capital cities, palaces or armies, nor did they collect taxes. Generally, sons did not automatically succeed fathers as *rajas*.

Two words were used to describe the people or the community as a whole. One was the word *jana*, which we still use in Hindi and other languages. The other was *vish*. The word *vaishya* comes from *vish*. Several *vish* or *jana* are mentioned by name. So we find reference to the *Puru jana* or *vish*, the *Bharata jana* or *vish*, the *Yadu jana* or *vish*, and so on.

Sometimes, the people who composed the hymns described themselves as *Aryas* and called their opponents *Dasas* or *Dasyus*. These were people who did not perform sacrifices, and probably spoke different languages. Later, the term *dasa* (and the feminine *dasi*) came to mean slave. Slaves were women and men who were often captured in war. They were treated as the property of their owners, who could make them do whatever work they wanted.

While the Rigveda was being composed in the north-west of the subcontinent, there were other developments elsewhere. Let us look at some of these.

### Silent sentinels—the story of the megaliths

Very big stone boulders are known as megaliths (literally big stones). These were carefully arranged by people, and were used to mark burial sites. The practice of erecting megaliths began about 3000 years ago, and was



prevalent throughout the Deccan, south India, in the north-east and Kashmir. While some megaliths can be seen on the surface, other megalithic burials are often underground. Sometimes, archaeologists find a circle of stone boulders or a single large stone standing on the ground. These are the only indications that there are burials beneath.



*This type of megalith is known as a cist. Some cists, like the one shown here, have port-holes which could be used as an entrance.*

There were several things that people did to make megaliths. We have made a list here. Try and arrange them in the correct order: digging pits in the earth, transporting stones, breaking boulders, placing stones in position, finding suitable stone, shaping stones, burying the dead.

All these burials have some common features. Generally, the dead were buried with distinctive pots, which are called Black and Red Ware. Also found are tools and weapons of iron and sometimes, skeletons of horses, horse equipment and ornaments of stone and gold. Was iron used in the Harappan cities?

### How do burials help in understanding social differences?

Archaeologists think that objects found with a skeleton probably belonged to the dead person.

(i) Sometimes, more objects are found in one grave than in another. For example, in Brahmagiri, one skeleton was buried with 33 gold beads, 2 stone beads, 4 copper bangles and one conchshell. Other skeletons had only a few pots.

(ii) These findings suggest that there was some difference in status amongst the people who were buried. Some were rich, others poor, some chiefs, while others were followers.

### Were some burial spots meant for certain families?

Sometimes, megaliths contain more than one skeleton. These indicate that people, perhaps belonging to the same family, were buried in the same place though not at the same time. The bodies of those who died later were brought into the grave through the portholes. Stone circles or boulders placed on the surface probably served as signposts to find the burial site, so that people could return to the same place whenever they wanted to.

### Megalithic site of Inamgaon

Inamgaon is a site on the river God, a tributary of the river Bhima. It was occupied between 3600 and 2700 years ago.

(i) Here, adults were generally buried in the ground, laid out straight, with the head towards the north.

(ii) Sometimes burials were within the houses.

(iii) Vessels that probably contained food and water were placed with the dead bodies.

(iv) One man was found buried in a large, four-legged clay jar in the courtyard of a five-roomed house

(one of the largest houses at the site) in the centre of the settlement.

(v) This house also had a granary. The body was placed in a cross-legged position.

### Occupations at Inamgaon

Archaeologists have found seeds of wheat, barley, rice, pulses, millets, peas and sesame. Bones of a number of animals, many bearing cut marks that show they may have been used as food, have also been found. These include cattle, buffalo, goat, sheep, dog, horse, ass, pig, *sambhar*, spotted deer, blackbuck, antelope, hare, and mongoose, besides birds, crocodile, turtle, crab and fish. There is evidence that fruits such as *ber*, *amla*, *jamun*, dates and a variety of berries were collected. Use this evidence to list the possible occupations of the people at Inamgaon.

### Elsewhere

Around 3500 years ago, we find some of the first evidence of writing in China. These writings were on animal bones. These are called oracle bones, because they were used to predict the future. Kings got scribes to write questions on the bones — would they win battles? Would the harvest be good? Would they have sons? The bones were then put into the fire, and they cracked because of the heat. Then fortunetellers studied these cracks, and tried to predict the future. As you may expect, they sometimes made mistakes.

These kings lived in palaces in cities. They amassed vast quantities of wealth, including large, elaborately decorated bronze vessels. However, they did not know the use of iron.

**Important Terms:** **Veda:** An Ancient Holy Book. **Language:** A system of communication using written or spoken words.

**Hymn:** A song in praise of God. **Chariot:** A vehicle used in ancient fighting. **Sacrifice:** The giving up of something. **Slave:** A drudge, contemptible person. **Megalith:** Large, tall stone in ancient times used to spot burial sites. **Burial:** Depositing dead body under earth. **Skeleton:** The bony framework of an animal or human. **Sentinels:** This term means 'to watch over as a guard' and in context to the chapter it refers to the Megaliths put on burial sites so as to guard and spot these burial sites. **Jana and Vish** - The community as a whole was described as 'jana' and 'vish'. Rig Vedic hymns mention about 'dasyas or dasyus' who spoke different languages. Later on, the term 'dasyas' came to be used for the 'slaves'. **Shruti** - the Rig Veda was not in written form, but was passed on orally. Knowledge passed on in this way is known as 'shruti'. The Vedic teachers took great care to teach students to pronounce words and memorise hymns correctly. **Sukta:** This term which means "well said" was used to describe the hymns of the Vedas.

**Important Dates:** **About 3600 years ago:** Beginning of settlement of Inamgaon. **About 3500 years ago (i.e. circa 1500 B.C.):** Beginning of composition of the oldest of the Vedas, the Rigveda. **About 3000 years ago (i.e. circa 1,000 B.C.):** Beginning of the building of megaliths. **About 2700 years ago (i.e. circa 700 B.C.):** End of settlement at Inamgaon. **About 2000 years ago:** Charaka wrote 'Charaka Samhita'. **About less than 200 years ago (in the 19th century A.D.):** Printing of the Rigveda for the first time.

## Chapter 6 Kingdoms, Kings and An Early Republic

### How some men became rulers

Some Rajas were probably chosen by the *jana*, the people. But, around 3000 years ago, we find some changes taking place in the ways in which *raj*as were chosen. Some men now became recognised as *raj*as by performing very big sacrifices.



The *ashvamedha* or horse sacrifice was one such ritual. A horse was let loose to wander freely and it was guarded by the *raja*'s men. If the horse wandered into the kingdoms of other *rajas* and they stopped it, they had to fight. If they allowed the horse to pass, it meant that they accepted that the *raja* who wanted to perform the sacrifice was stronger than them. These *rajas* were then invited to the sacrifice, which was performed by specially trained priests, who were rewarded with gifts. The *raja* who organised the sacrifice was recognised as being very powerful, and all those who came brought gifts for him.

Priests performed the rituals. The ordinary people, the *vish* or *vaishya*, also brought gifts. However, some people, such as those who were regarded as *shudras* by the priests, were excluded from many rituals.

### Varnas

Later Vedic books include the Samaveda, Yajurveda and Atharvaveda, as well as other books. These were composed by priests, and described how rituals were to be performed. They also contained rules about society. There were several different groups in society at this time — priests and warriors, farmers, herders, traders, crafts persons, labourers, fishing folk, and forest people. Some priests and warriors were rich, as were some farmers and traders. Others, including many herders, crafts persons, labourers, fishing folk and hunters and gatherers, were poor. The priests divided people into four groups, called *varnas*. According to them, each varna had a different set of functions.

The first *varna* was that of the *brahmin*. *Brahmins* were expected to study (and teach) the Vedas, perform sacrifices and receive gifts.

In the second place were the rulers, also known as *kshatriyas*. They were expected to fight battles and protect people.

Third were the *vish* or the *vaishyas*. They were expected to be farmers, herders, and traders. Both the *kshatriyas* and the *vaishyas* could perform sacrifices. Last were the *shudras*, who had to serve the other three groups and could not perform any rituals. Often, women were also grouped with the *shudras*. Both women and *shudras* were not allowed to study the Vedas.

The priests also said that these groups were decided on the basis of birth. For example, if one's father and mother were *brahmins* one would automatically become a *brahmin*, and so on. Later, they classified some people as *untouchable*. These included some crafts persons, hunters and gatherers, as well as people who helped perform burials and cremations. The priests said that contact with these groups was polluting.

Many people did not accept the system of *varna* laid down by the *brahmins*. Some kings thought they were superior to the priests. Others felt that birth could not be a basis for deciding which *varna* people belonged to. Besides, some people felt that there should be no differences amongst people based on occupation.

Others felt that everybody should be able to perform rituals. And others condemned the practice of untouchability. Also, there were many areas in the subcontinent, such as the north-east, where social and economic differences were not very sharp, and where the influence of the priests was limited. Why did people oppose the system of *varnas*?



Map: 4 Important Janapadas, Mahajanapadas and Cities

### Janapadas

The *rajas* who performed these big sacrifices were now recognised as being *rajas* of *janapadas* rather than *janas*. The word *janapada* literally means the land where the *jana* set its foot, and settled down.

Archaeologists have excavated a number of settlements in these *janapadas*, such as Purana Qila in Delhi, Hastinapura near Meerut, and Atranjikhhera, near Etah (the last two are in Uttar Pradesh). They found that people lived in huts, and kept cattle as well as other animals. They also grew a variety of crops — rice, wheat, barley, pulses, sugarcane, sesame and mustard. They made earthen pots. Some of these were grey in colour, others were red. One special type of pottery found at these sites is known as Painted Grey Ware. As is obvious from the name, these grey pots had painted designs, usually simple lines and geometric patterns.

### Mahajanapadas

About 2500 years ago, some *janapadas* became more important than others, and were known as *mahajanapadas*. Some of these are shown on Map 4. Most *mahajanapadas* had a capital city, many of these were *fortified*. This means that huge walls of wood, brick or stone were built around them.

The new *rajas* now began maintaining armies built fortified areas. Soldiers were paid regular salaries and maintained by the king throughout the year. Some payments were probably made using punch marked coins.

### Taxes

As the rulers of the *mahajanapadas* were (a) building huge forts (b) maintaining big armies, they needed more resources. And they needed officials to collect these. So, instead of depending on occasional gifts brought by people, as in the case of the *raja* of the *janapadas*, they started collecting regular *taxes*.

- Taxes on crops were the most important. This was because most people were farmers. Usually, the tax was fixed at 1/6<sup>th</sup> of what was produced. This was known as *bhaga* or a share.
- There were taxes on crafts persons as well. These

could have been in the form of labour. For example, a weaver or a smith may have had to work for a day every month for the king.

- Herders were also expected to pay taxes in the form of animals and animal produce.
- There were also taxes on goods that were bought and sold, through trade.
- And hunters and gatherers also had to provide forest produce to the *raja*.

What do you think would have been provided by hunters and gatherers?

### Changes in agriculture

There were two major changes in agriculture around this time. One was the growing use of iron ploughshares. This meant that heavy, clayey soil could be turned over better than with a wooden ploughshare, so that more grain could be produced. Second, people began transplanting paddy. This meant that instead of scattering seed on the ground, from which plants would sprout, saplings were grown and then planted in the fields. This led to increased production, as many more plants survived. However, it was back breaking work. Generally, slave men and women, (*dasas* and *dasis*) and landless agricultural labourers (*kammakaras*) had to do this work.

Can you think why kings would encourage these changes?

### A closer look — (a) Magadha

Magadha became the most important *mahajanapada* in about two hundred years. Many rivers such as the Ganga and Son flowed through Magadha. This was important for (a) transport, (b) water supplies (c) making the land fertile. Parts of Magadha were forested. Elephants, which lived in the forest, could be captured and trained for the army. Forests also provided wood for building houses, carts and chariots. Besides, there were iron ore mines in the region that could be tapped to make strong tools and weapons.

Magadha had two very powerful rulers, Bimbisara and Ajatasattu, who used all possible means to conquer other *janapadas*. Mahapadma Nanda was another important ruler. He extended his control up to the north-west part of the subcontinent. Rajagriha (present-day Rajgir) in Bihar was the capital of Magadha for several years. Later the capital was shifted to Pataliputra (present-day Patna).

More than 2300 years ago, a ruler named Alexander, who lived in Macedonia in Europe, wanted to become a world conqueror. Of course, he didn't conquer the world, but did conquer parts of Egypt and West Asia, and came to the Indian subcontinent, reaching up to the banks of the Beas. When he wanted to march further eastwards, his soldiers refused. They were scared, as they had heard that the rulers of India had vast armies of foot soldiers, chariots and elephants.

### A closer look — (b) Vajji

While Magadha became a powerful kingdom, Vajji, with its capital at Vaishali (Bihar), was under a different form of government, known as *gana* or *sangha*.

In a *gana* or a *sangha* there were not one, but many rulers. Sometimes, even when thousands of men ruled together, each one was known as a *raja*. These *rajas* performed rituals together. They also met in assemblies, and decided what had to be done and how, through discussion and debate. For example, if they were attacked by an enemy, they met to discuss what should be done to meet the threat. However, women, *dasas* and *kammakaras* could not participate in these assemblies.

Both the Buddha and Mahavira belonged to *ganas* or *sanghas*. Some of the most vivid descriptions of life in the *sanghas* can be found in Buddhist books.

**Gana** Is used for a group that has many members.

**Sangha** Means organisation or association. This is an account of the Vajjis from the Digha Nikaya, a famous Buddhist book, which contains some of the speeches of the Buddha. These were written down about 2300 years ago.

### Ajatasattu and the Vajjis

Ajatasattu wanted to attack the Vajjis. He sent his minister named Vassakara to the Buddha to get his advice on the matter.

The Buddha asked whether the Vajjis met frequently, in full assemblies. When he heard that they did, he replied that the Vajjis would continue to prosper as long as:

- They held full and frequent public assemblies.
- They met and acted together.
- They followed established rules.
- They respected, supported and listened to elders.
- Vajji women were not held by force or captured.
- *Chaityas* (local shrines) were maintained in both towns and villages.
- Wise saints who followed different beliefs were respected and allowed to enter and leave the country freely.

In what ways was the Vajji *sangha* different from the other *mahajanapadas*? Try and list at least three differences.

*Rajas* of powerful kingdoms tried to conquer the *sanghas*. Nevertheless, these lasted for a very long time, till about 1500 years ago, when the last of the *ganas* or *sanghas* were conquered by the Gupta rulers, about whom you will read in Chapter 11.

### Elsewhere

Around 2500 years ago, the people of Athens set up a form of government, which was called a democracy, which lasted for about 200 years. All free men over the age of 30 were recognised as full citizens. There was an assembly that met at least 40 times a year to decide on important matters. All citizens could attend these meetings. Appointments for many positions were made through lottery. All those who wanted to be chosen gave in their names, and then some were selected through lottery. Citizens were expected to serve in the army and the navy. However, women were not considered citizens. Also, many foreigners, who lived and worked in Athens as merchants and crafts persons did not have rights as citizens. Besides, there were several thousand slaves in Athens, who worked in mines, fields, households and workshops. They too were not treated as citizens. Do you think this was a true democracy?

**Important Terms:** **Ashvamedha:** Horse sacrifice in the form of a ritual. **Varna:** A division of society groups. **Janapada:** The land where the jana set its foot. **Mahajanapada:** Greater in size and more important than Janapadas. **Fortification:** Defensive work. **Army:** A force. **Tax:** A rate of sum of money levied on persons or property. **Transplantation:** The saplings were grown and then planted in the field. **Gana or Sangha:** Having many rulers at a time. **Democracy:** Government by the people at large.

**Important Dates:** About 3,000 years ago (around 1000 B.C.): New kinds of 'rajas'. About 2,500 years ago (around 500 B.C.): Formation of 'Mahajanapadas'. About 2,300 years ago (around 300 B.C.): Invasion of Alexander the Great.

## Chapter 7

### New Questions And Ideas

#### The story of Buddha

Siddhartha, also known as Gautama, the founder of Buddhism, was born about 2500 years ago. This was a time of rapid change in the lives of people. As you saw in Chapter 6, some kings in the *mahajanapadas* were growing more powerful. New cities were developing, and life was changing in the villages as well. Many thinkers were trying to understand these changes in society. They also wanted to try and find out the true meaning of life.

The Buddha belonged to a small *gana* known as the Sakya *gana*, and was a *kshatriya*. When he was a young man, he left the comforts of his home in search of knowledge. He wandered for several years, meeting and holding discussions with other thinkers. He finally decided to find his own path to realisation, and meditated for days on end under a *peepal* tree at Bodhi Gaya in Bihar, where he attained enlightenment. After that, he was known as the *Buddha* or the Wise One. He then went to Sarnath, near Varanasi, where he taught for the first time. He spent the rest of his life travelling on foot, going from place to place, teaching people, till he passed away at Kusinara.

The Buddha taught that life is full of suffering and unhappiness. This is caused because we have cravings and desires (which often cannot be fulfilled). Sometimes, even if we get what we want, we are not satisfied, and want even more (or want other things). The Buddha described this as thirst or *tanha*. He taught that this constant craving could be removed by following moderation in everything.

He also taught people to be kind, and to respect the lives of others, including animals. He believed that the results of our actions (called *karma*), whether good or bad, affect us both in this life and the next. The Buddha taught in the language of the ordinary people, *Prakrit*, so that everybody could understand his message. What was the language used to compose the Vedas?

#### Upanishads

Around the time that the Buddha was preaching and perhaps a little earlier, other thinkers also tried to find answers to difficult questions. Some of them wanted to know about life after death, others wanted to know why sacrifices should be performed. Many of these thinkers felt that there was something permanent in the universe that would last even after death. They described this as the *atman* or the individual soul and the *brahman* or the universal soul. They believed that ultimately, both the *atman* and the *brahman* were one.

Many of their ideas were recorded in the Upanishads. These were part of the later Vedic texts. Upanishad literally means 'approaching and sitting near' and the texts contain conversations between teachers and students. Often, ideas were presented through simple dialogues.

Most Upanishadic thinkers were men, especially *brahmins* and *rajas*. Occasionally, there is mention of women thinkers, such as Gargi, who was famous for her learning, and participated in debates held in royal courts. Poor people rarely took part in these discussions. One famous exception was Satyakama Jabala, who was named after his mother, the slave woman Jabali. He had a deep desire to learn about reality, was accepted as a student by a *brahmin* teacher named Gautama, and became one of the best-known

thinkers of the time. Many of the ideas of the Upanishads were later developed by the famous thinker Shankaracharya.

#### Panini, the grammarian

This was also the time when other scholars were at work. One of the most famous was Panini, who prepared a grammar for Sanskrit. He arranged the vowels and the consonants in a special order, and then used these to create formulae like those found in Algebra. He used these to write down the rules of the language in short formulae (around 3000 of them).

#### Jainism

The most famous thinker of the Jainas, Vardhamana Mahavira, also spread his message around this time, i.e. 2500 years ago. He was a *kshatriya* prince of the Lichchhavis, a group that was part of the Vajji *sangha*, about which you read in Chapter 6. At the age of thirty, he left home and went to live in a forest. For twelve years he led a hard and lonely life, at the end of which he attained enlightenment.

He taught a simple doctrine: men and women who wished to know the truth must leave their homes. They must follow very strictly the rules of *ahimsa*, which means not hurting or killing living beings. "All beings," said Mahavira "long to live. To all things life is dear." Ordinary people could understand the teachings of Mahavira and his followers, because they used Prakrit. There were several forms of Prakrit, used in different parts of the country, and named after the regions in which they were used. For example, the Prakrit spoken in Magadha was known as Magadhi.

Followers of Mahavira, who were known as *Jainas*, had to lead very simple lives, begging for food. They had to be absolutely honest, and were especially asked not to steal. Also, they had to observe celibacy. And men had to give up everything, including their clothes.

It was very difficult for most men and women to follow these strict rules. Nevertheless, thousands left their homes to learn and teach this new way of life. Many more remained behind and supported those who became monks and nuns, providing them with food.

#### Jaina

The word Jaina comes from the term Jina, meaning conqueror. Why do you think the term Jina was used for Mahavira? Jainism was supported mainly by traders. Farmers, who had to kill insects to protect their crops, found it more difficult to follow the rules. Over hundreds of years, Jainism spread to different parts of north India, and to Gujarat, Tamil Nadu and Karnataka. The teachings of Mahavira and his followers were transmitted orally for several centuries. They were written down in the form in which they are presently available at a place called Valabhi, in Gujarat, about 1500 years ago.

#### The sangha

Both the Mahavira and the Buddha felt that only those who left their homes could gain true knowledge. They arranged for them to stay together in the *sangha*, an association of those who left their homes. The rules made for the Buddhist *sangha* were written down in a book called the Vinaya Pitaka. From this we know that there were separate branches for men and women. All men could join the *sangha*. However, children had to take the permission of their parents and slaves that of their masters. Those who worked for the king had to take his permission and debtors that of creditors. Women had to take their husbands' permission. Men and women who joined the *sangha* led simple



lives. They meditated for most of the time, and went to cities and villages to beg for food during fixed hours. That is why they were known as *bhikkhus* (the Prakrit word for renouncer — beggar) and *bhikkhunis*. They taught others, and helped one another. They also held meetings to settle any quarrels that took place within the *sangha*. Those who joined the *sangha* included *brahmins*, *kshatriyas*, merchants, labourers, barbers, courtesans and slaves. Many of them wrote down the teachings of the Buddha. Some of them also composed beautiful poems, describing their life in the *sangha*. *Many caves hollowed out in the hills such as one in Karle, present-day Maharashtra. Monks and nuns lived and meditated in these shelters.*

### Monasteries

To begin with, both Jaina and Buddhist monks went from place to place throughout the year, teaching people. The only time they stayed in one place was during the rainy season, when it was very difficult to travel. Then, their supporters built temporary shelters for them in gardens, or they lived in natural caves in hilly areas.

As time went on, many supporters of the monks and nuns, and they themselves, felt the need for more permanent shelters and so monasteries were built. These were known as *viharas*. The earliest *viharas* were made of wood, and then of brick. Some were even in caves that were dug out in hills, especially in western India.

Very often, the land on which the *vihara* was built was donated by a rich merchant or a landowner, or the king. The local people came with gifts of food, clothing and medicines for the monks and nuns. In return, they taught the people. Over the centuries, Buddhism spread to many parts of the subcontinent and beyond. You will learn more about this in Chapter 10.

### The system of ashramas

Around the time when Jainism and Buddhism were becoming popular, *brahmins* developed the system of *ashramas*. Here, the word *ashrama* does not mean a place where people live and meditate. It is used instead for a *stage of life*.

Four *ashramas* were recognised: *brahmacharya*, *grihastha*, *vanaprastha* and *samnyasa*.

*Brahmin*, *kshatriya* and *vaishya* men were expected to lead simple lives and study the Vedas during the early years of their life (*brahmacharya*). Then they had to marry and live as householders (*grihastha*). Then they had to live in the forest and meditate (*vanaprastha*). Finally, they had to give up everything and become *samnyasins*. The system of *ashramas* allowed men to spend some part of their lives in meditation. Generally, women were not allowed to study the Vedas, and they had to follow the *ashramas* chosen by their husbands. In what way was the system of *ashramas* different from life in the *sangha*? What are the *varnas* mentioned here? Were all four *varnas* allowed to participate in the system of *ashramas*?

### Elsewhere

Find Iran in your atlas. Zoroaster was an Iranian prophet. His teachings are contained in a book called the Avesta. The language of the Avesta, and the practices described in it are very similar to those of the Vedas. The basic teachings of Zoroaster are contained in the maxim “Good thoughts, Good Words and Good Deeds.” Here is a verse from the Zend Avesta: “Lord, grant strength and the rule of truth and good thinking, by means of which one shall create peace and

tranquillity.”

For more than a thousand years, Zoroastrianism was a major religion in Iran. Later, some Zoroastrians migrated from Iran and settled down in the coastal towns of Gujarat and Maharashtra. They were the ancestors of today’s Parsis.

**Important Terms:** **Tanha:** A thirst for desiring more and more. **Prakrit:** A language used by Buddha for ordinary people. **Upanishad:** Texts containing conversation between teacher and students. **Atman:** Individual soul. **Brahman:** Universal soul. **Ahimsa:** No hurting or killing of living beings. **Jain:** Followers of Mahavira. **Sangha:** An association of people. **Bhikkhu:** Prakrit word for beggar. **Vihara:** Permanent shelters for monks and nuns. **Monastery:** Residence for men who lead a retired life. **Ashram:** A nunnery. **The Sangha:** Organisations where monks spent much of their time on religious studies and meditation. **Vinaya Pitaka:** The rules made for the Buddhist Sanghas are contained in a text called Vinaya Pitaka. **Prakrit:** It was the language of the masses which was used to propagate messages of the thinkers like Buddha and Mahavira. **Upanishads:** Various thinkers tried to find answers to difficult questions. **Panini:** The famous grammarian Panini, was the one who prepared the grammar for Sanskrit and arranged the vowels and consonants in a special order.

**Important Dates:** Around 2500 years ago (about 500 B.C.):

Upanishadic thinkers preached. Around 2500 years ago

(About 500 B.C.): Mahavira and the Buddha preached.

Around 1500 years ago (About 500 B.C.): The Jaina texts were written down.

## Chapter 8 Ashoka, The Emperor who Gave Up War

*Map: The Mauryan Empire: showing the principal cities and some of the places where inscriptions were found. The places where inscriptions of Ashoka have been found are marked with dots. These were included within the empire. Name the countries where Ashokan inscriptions have been found. Which Indian states were outside the empire?*

### A very big kingdom = an empire

The lions that we see on our notes and coins have a long history. They were carved in stone, and placed on top of a massive stone pillar at Sarnath. Ashoka was one of the greatest rulers known to history and on his instructions inscriptions were carved on pillars, as well as on rock surfaces. The empire that Ashoka ruled was founded by his grandfather, Chandragupta Maurya, more than 2300 years ago. Chandragupta was supported by a wise man named Chanakya or Kautilya. Many of Chanakya’s ideas were written down in a book called the Arthashastra.

### Dynasty

When members of the same family become rulers one after another, the family is often called a dynasty. The Mauryas were a dynasty with three important rulers — Chandragupta, his son Bindusara, and Bindusara’s son, Ashoka.

There were several cities in the empire. These included the capital Pataliputra, Taxila, and Ujjain. Taxila was a gateway to the northwest, including Central Asia, while Ujjain lay on the route from north to south India.

Merchants, officials and crafts persons probably lived in these cities.





### Mauryan Rule

As the empire was very large, different parts were ruled differently by various Mauryans.

(i) The area around Pataliputra was under the direct control of the emperor. The officials were appointed to collect taxes from farmers, herders, crafts persons and traders who lived in villages and towns in the area. Officials also punished those who disobeyed the ruler's orders.

(ii) There were other areas or provinces. Each of them was ruled from a provincial capital such as Taxila or Ujjain and there was some amount of control from Pataliputra. Royal princes were often sent as Governors.

(iii) Besides, there were vast areas between these centres. Here, the Mauryas tried to control roads and rivers which were important for transport and to collect whatever resources were available as tax and tribute.

(iv) There were also the forested regions. People living in these areas were more or less independent, but were expected to provide elephants, timber, honey and wax to the Mauryan officials.

### Administration of Ashoka

(i) **Administration:** During Ashoka's time, the king was the head of the state and was assisted by 'mantriparishad'—the council of ministers. His empire was divided into provinces and the provinces were divided into districts. Villages were the smallest units. City was the basic trade centre.

(ii) **Pataliputra:** The capital city was administered by the Chief-Nagarika with the City Council of 30 members, who, in turn, had 6 boards, each board in charge of various functions. All the cities were administered like Pataliputra.

(iii) **Education:** It was fairly widespread and teaching was mainly the job of the Brahmins. Buddhist monasteries were the educational institutions. Famous educational centers were established in Taxila, Ujjain and Varanasi.

(iv) **Revenue:** The income for the empire came through taxes which were both in cash and kind, levied on land holding and trade. Tax collection was hardly very strict.

(v) **Army:** The army was very huge and functioned under senapati who directly reported to the king. The Soldiers were well equipped with swords, bows and arrows and spears and were looked after very well. Army was divided into six branches. They were:

Cavalry, Infantry, Chariots, Elephants, Transport and Navy.

(vi) **Economy:** The administrators helped villagers by clearing forest area and starting new settlements. They also helped people start agriculture and animal husbandry.

### Tribute

Unlike taxes, which were collected on a regular basis, tribute was collected as and when it was possible from people who gave a variety of things, more or less willingly. There were also the forested regions. People living in these areas were more or less independent, but may have been expected to provide elephants, timber, honey and wax to Mauryan officials.

### What was Ashoka's dhamma?

Ashoka's *dhamma* did not involve worship of a god, or performance of a sacrifice. He felt that just as a father tries to teach his children, he had a duty to instruct his subjects. He was also inspired by the teachings of the Buddha. There were a number of problems that troubled him. People in the empire followed different religions, and this sometimes led to conflict. Animals were sacrificed. Slaves and servants were ill treated. Besides, there were quarrels in families and amongst neighbours. Ashoka felt it was his duty to solve these problems. So, he appointed officials, known as the *dhammamahamatta* who went from place to place teaching people about *dhamma*. Besides, Ashoka got his messages inscribed on rocks and pillars, instructing his officials to read his message to those who could not read it themselves.

Ashoka also sent messengers to spread ideas about *dhamma* to other lands, such as Syria, Egypt, Greece and Sri Lanka. He built roads, dug wells, and built rest houses. Besides, he arranged for medical treatment for both human beings and animals.

### Ashoka's messages to his subjects:

"People perform a variety of rituals when they fall ill, when their children get married, when children are born, or when they go on a journey. These rituals are not useful. Rather observe: being gentle with slaves and servants. Respecting one's elders. Treating all creatures with compassion. Giving gifts to brahmins and monks." "It is both wrong to praise one's own religion or criticise another's. Each one should respect the other's religion. If one praises one's own religion while criticising another's, one is actually doing greater harm to one's own religion. Therefore, one should try to understand the main ideas of another's religion, and respect it."

### Elsewhere

Somewhat before the time of the Mauryan empire, about 2400 years ago, emperors in China began building the Great Wall. It was meant to protect the northern frontier of the empire from pastoral people. Additions to the wall were made over a period of 2000 years because the frontiers of the empire kept shifting. The wall is about 6400 km long, and is made of stone and brick, with a road along the top. Several thousand people worked to build the wall. There are watch towers all along, at distances of about 100-200 m. In what ways do you think Ashoka's attitude toward neighbouring peoples was different from that of the Chinese emperors?

**Important Terms:** **Province:** A part of country which has its own local government. **Dhamma:** It is a Prakrit word for the Sanskrit term 'Dharm'.

**Important Dates:** About 2300 years ago (about 300 B.C.): Chandragupta Maurya founded the Murya empire. 273 B.C.:

Ashoka's reign began. **232 B.C.:** Ashoka's death. **185 B.C.:** The end of the Mauryan empire.

## Chapter 9 Vital Villages, Thriving Towns

### Iron tools and agriculture

The use of iron began in the subcontinent around 3000 years ago. Some of the largest collections of iron tools and weapons were found in the megalithic burials, about which you read in Chapter 5. Around 2500 years ago, there is evidence for the growing use of iron tools. These included axes for clearing forests, and the iron ploughshare. As we had seen (Chapter 6) the ploughshare was useful for increasing agricultural production.

### Other steps to increase production: irrigation

The kings and kingdoms you have been reading about could not have existed without the support of flourishing villages. While new tools and the system of transplantation increased production, irrigation was also used. Irrigation works that were built during this time included canals, wells, tanks, and artificial lakes.

### Who lived in the villages?

There were at least three different kinds of people living in most villages in the southern and northern parts of the subcontinent. In the Tamil region, large landowners were known as *vellalar*, ordinary ploughmen were known as *uzhavar*, and landless labourers, including slaves, were known as *kadaisiyar* and *adimai*.

In the northern part of the country, the village headman was known as the *gramabhojaka*. Usually, men from the same family held the position for generations. In other words, the post was hereditary. The *gramabhojaka* was often the largest landowner. Generally, he had slaves and hired workers to cultivate the land. Besides, as he was powerful, the king often used him to collect taxes from the village. He also functioned as a judge, and sometimes as a policeman.

Apart from the *gramabhojaka*, there were other independent farmers, known as *grihapatis*, most of whom were smaller landowners. And then there were men and women such as the *dasakarmakara*, who did not own land, and had to earn a living working on the fields owned by others. In most villages there were also some crafts persons such as the blacksmith, potter, carpenter and weaver.

### The earliest Tamil compositions

Some of the earliest works in Tamil, known as *Sangam* literature, were composed around 2300 years ago. These texts were called *Sangam* because they were supposed to have been composed and compiled in assemblies (known as *sangams*) of poets that were held in the city of Madurai. The Tamil terms mentioned above are found in *Sangam* literature.

### The ways of archaeologists

The archaeologists have found about these cities through the following:

- (i) **Jatakas:** These were stories that were probably composed by ordinary people and then written down and preserved by Buddhist monks.
- (ii) **Sculptures:** These were carved structures, depicting peoples' lives in towns and villages as well as in the forests. Many of these sculptures were used to decorate railings, pillars and gateways of buildings that were visited by people.
- (iii) **Ring wells:** In many cities, archaeologists

have found rows of pots, or ceramic rings arranged one on top of the other. These are known as ring wells.

(iv) From the accounts of sailors and travellers who visited various places, one of the most detailed accounts that have been found was by an unknown Greek sailor. He described all the ports he visited.

### Cities with many functions

#### City Mathura

(i) Mathura has been an important settlement for more than 2500 years. It was important because it was located at the crossroads of two major routes of travel and trade — from the North-West to the East and from North to South.

(ii) Mathura was also a centre where some extremely fine sculptures were produced.

(iii) Around 2000 years ago, Mathura became the second capital of the Kushanas.

(iv) Mathura was also a religious centre — there were Buddhist monasteries, Jain shrines and it was an important centre for the worship of Krishna.

#### City Arikamedu

(i) Between 2200 and 1900 years ago, Arikamedu was a coastal settlement where ships unloaded goods from distant lands.

(ii) A massive brick structure, which may have been a warehouse was found at the site.

(iii) Other findings include pottery from the Mediterranean region, such as amphorae (tall double-handled jars that contained liquids such as wine or oil) and stamped red-glazed pottery, known as Arretine Ware which was named after a city in Italy.

(iv) Roman lamps, glassware and gems have also been found at the site.

(v) Small tanks have been found that were probably dyeing vats, used to dye cloth.

### The story of Barygaza (the Greek name for Bharuch)

The gulf is very narrow at Barygaza, and very hard to navigate for those coming from the sea. Ships had to be steered in by skilful and experienced local fishermen who were employed by the king. The imports into Barygaza were wine, copper, tin, lead, coral, topaz, cloth, gold and silver coins. Exports from the town included plants from the Himalayas, ivory, agate, carnelian, cotton, silk and perfumes.

### Crafts and crafts persons

We also have archaeological evidence for crafts. These include extremely fine pottery, known as the Northern Black Polished Ware. It gets its name from the fact that it is generally found in the northern part of the subcontinent. It is usually black in colour, and has a fine sheen. Remember that the archaeological evidence for many crafts may not have survived. We know from texts that the manufacture of cloth was important. There were famous centres such as Varanasi in the north, and Madurai in the south. Both men and women worked in these centres.

Many crafts persons and merchants now formed associations known as *shrenis*. These *shrenis* of crafts persons provided training, procured raw material, and distributed the finished product. Then *shrenis* of merchants organised the trade. *Shrenis* also served as banks, where rich men and women deposited money. This was invested, and part of the interest was returned or used to support religious institutions such as monasteries.

### Elsewhere

Rome is one of the oldest cities in Europe, and developed around the same time as the cities in the Ganga valley. Rome was the capital of one of the largest empires — one that spread across Europe, North Africa, and West Asia. Augustus, one of the most important emperors, who ruled about 2000 years ago, said that he found Rome a city of brick, and made it into a city of marble. He, and later rulers, built temples and palaces. They also built huge amphitheatres — open arenas surrounded by tiers of seats — where citizens could watch all kinds of shows, and public baths (with separate timings for men and women), where people met and relaxed. Huge aqueducts — channels to supply water — were built to bring water to the city — for the baths, fountains and toilets. *Why do you think the amphitheatres and aqueducts have survived?*

**Important Terms:** **Port:** A harbour. **Ring well:** To sound like a bell. **City:** A large important town. **Shreni:** An association formed by crafts persons and merchants. **Sangam:** Assemblies. **Landowners and Labourers:** In the south, large landowners (vellalar), ploughmen (uzhavar), landless labourers and slaves (kadaiyyar and adimai) were amongst the main community members. In the northern parts, the village headman (grama bhojaka) was hereditary, who was the biggest landowner and used to collect taxes for the King. **Sangam Tamil Compositions:** Sangam literature was composed 2300 years ago. It was called as Sangam because it was written and compiled in Assemblies known as Sangams of Poets which were held in the city of Madurai. **Arikamedu:** Between 2200 and 1900 years ago, Arikamedu was a coastal settlement where ships unloaded goods from distant lands. A massive brick structure, which may have been a warehouse, was found at the site.

**Important Dates:** **About 3000 years ago (around 1000 B.C.):** Beginning of the use of iron in the Indian subcontinent. **2500 years ago (around 500 B.C.):** Increase in the use of iron, development of cities and the punchmarked coins. **2300 years ago (around 300 B.C.):** The 'Sangam' literature. **Between 2200 and 1900 years ago (between C. 100 B.C. and C. 100 A.D.):** Settlement in Arikamedu (in Puducherry).

## Chapter 10 Traders, Kings And Pilgrims

### How to find out about trade and traders

You read about the Northern Black Polished Ware in Chapter 9. This fine pottery, especially bowls and plates, were found from several archaeological sites throughout the subcontinent. How do you think it reached these places? Traders may have carried them from the places where they were made, to sell them at other places.

South India was famous for gold, spices, especially pepper, and precious stones. Pepper was particularly valued in the Roman Empire, so much so that it was known as black gold. So, traders carried many of these goods to Rome in ships, across the sea, and by land in caravans. There must have been quite a lot of trade as many Roman gold coins have been found in south India. Traders explored several sea routes. Some of these followed the coasts. There were others across the Arabian Sea and the Bay of Bengal, where sailors took advantage of the monsoon winds to cross the seas more quickly. So, if they wanted to reach the western coast of the subcontinent from East Africa or Arabia, they chose to sail with the south-west monsoon. And sturdy ships had to be built for these long journeys.

### New kingdoms along the coasts

The southern half of the subcontinent is marked by a long coastline, and with hills, plateaus, and river valleys. Amongst the river valleys, that of the Kaveri is the most

fertile. Chiefs and kings who controlled the river valleys and the coasts became rich and powerful. Sangam poems mention the *muvendar*. This is a Tamil word meaning three chiefs, used for the heads of three ruling families, the Cholas, Cheras, and Pandyas, who became powerful in south India around 2300 years ago. Each of the three chiefs had two centres of power: one inland, and one on the coast. Of these six cities, two were very important: Puhar or Kaveripattinam, the port of the Cholas, and Madurai, the capital of the Pandyas. The chiefs did not collect regular taxes. Instead, they demanded and received gifts from the people. They also went on military expeditions, and collected tribute from neighbouring areas. They kept some of the wealth and distributed the rest amongst their supporters, including members of their family, soldiers, and poets. Many poets whose compositions are found in the Sangam collection composed poems in praise of chiefs who often rewarded them with precious stones, gold, horses, elephants, chariots, and fine cloth.

Around 200 years later a dynasty known as the Satavahanas became powerful in western India. The most important ruler of the Satavahanas was Gautamiputra Shri Satakarni. We know about him from an inscription composed by his mother, Gautami Balashri. He and other Satavahana rulers were known as lords of the *dakshinapatha*, literally the route leading to the south, which was also used as a name for the entire southern region. He sent his army to the eastern, western and southern coasts.

### The story of the Silk Route

Techniques of making silk were first invented in China around 7000 years ago. About 2000 years ago, wearing silk became the fashion amongst rulers and rich people in Rome. It was very expensive, as it had to be brought all the way from China, along dangerous roads, through mountains and deserts. The best-known of the rulers who controlled the Silk Route were the Kushanas, who ruled over central Asia and north-west India around 2000 years ago. This was because they could benefit from taxes, tributes and gifts that were brought by traders travelling along the route. Their two major centres of power were Peshawar and Mathura. Taxila was also included in their kingdom. During their rule, a branch of the Silk Route extended from Central Asia down to the seaports at the mouth of the river Indus, from where silk was shipped westwards to the Roman Empire. The Kushanas were amongst the earliest rulers of the subcontinent to issue gold coins. These were used by traders along the Silk Route.

### The spread of Buddhism

The most famous Kushana ruler was Kanishka, who ruled around 1900 years ago. He organised a Buddhist council, where scholars met and discussed important matters. Ashvaghosha, a poet who composed a biography of the Buddha, the *Buddhacharita*, lived in his court. Ashvaghosha and other Buddhist scholars now began writing in Sanskrit.

A new form of Buddhism, known as Mahayana Buddhism, now developed. This had two distinct features. Earlier, the Buddha's presence was shown in sculpture by using certain signs. For instance, his attainment of enlightenment was shown by sculptures of the *peepal* tree.

Now, statues of the Buddha were made. Many of these were made in Mathura, while others were made in Taxila.

The second change was a belief in *Bodhisattvas*. These were supposed to be persons who had attained



enlightenment. Once they attained enlightenment, they could live in complete isolation and meditate in peace. However, instead of doing that, they remained in the world to teach and help other people. The worship of Bodhisattvas became very popular, and spread throughout Central Asia, China, and later to Korea and Japan.

Buddhism also spread to western and southern India, where dozens of caves were hollowed out of hills for monks to live in. Some of these caves were made on the orders of kings and queens, others by merchants and farmers. These were often located near passes through the Western Ghats. Roads connecting prosperous ports on the coast with cities in the Deccan ran through these passes. Traders probably halted in these cave monasteries during their travels.

Buddhism also spread south eastwards, to Sri Lanka, Myanmar, Thailand, and other parts of Southeast Asia including Indonesia. The older form of Buddhism, known as Theravada Buddhism was more popular in these areas.

### The quest of the pilgrims

As traders journeyed to distant lands in caravans and ships, *pilgrims* often travelled with them.

Pilgrims are men and women who undertake journeys to holy places in order to offer worship.

The best-known of these are the Chinese Buddhist pilgrims, Fa Xian, who came to the subcontinent about 1600 years ago, Xuan Zang (who came around 1400 years ago) and I-Qing, who came about 50 years after Xuan Zang. They came to visit places associated with the life of the Buddha (Chapter 7) as well as famous monasteries.

*Look at Mathura Budha (Left) and Taxila Budha (Right) note the similarities and differences that you may find.*



### Nalanda – A unique centre of Buddhist learning:

Xuan Zang, and other pilgrims spent time studying in Nalanda, (Bihar) the most famous Buddhist monastery of the period.

*Vishnu as Varaha — an image from Eran, Madhya Pradesh. This magnificent statue is of a special form of Vishnu, the Varaha or boar. According to the Puranas (see Chapter 12) Vishnu took the shape of a boar in order to rescue the earth, which had sunk into water. Here the earth is shown as a woman.*

### The beginning of Bhakti

This was also the time when the worship of certain deities, which became a central feature of later Hinduism, gained in importance. These deities included Shiva, Vishnu, and goddesses such as Durga.

These deities were worshipped through *Bhakti*, an idea that became very popular at this time. *Bhakti* is generally understood as a person's devotion to his or her chosen deity. Anybody, whether rich or poor, belonging to the so-called 'high' or 'low' castes, man or woman, could follow the path of *Bhakti*. The idea of *Bhakti* is present in the Bhagavad Gita, a sacred book of the Hindus, which is included in the Mahabharata (see Chapter 12). In this Krishna the god, asks Arjuna, his devotee and friend, to abandon all *dharma*s and take refuge in him, as only he can set Arjuna free from every evil. This form of worship gradually spread to different parts of the country. Those who followed the system of *Bhakti* emphasised devotion and individual worship of a god or goddess, rather than the performance of elaborate sacrifices.

According to this system of belief, if a devotee worships the chosen deity with a pure heart, the deity will appear in the form in which he or she may desire. So, the deity could be thought of as a human being, lion, tree or any other form. Once this idea gained acceptance, artists made beautiful images of these deities.

### Bhakti

Comes from the Sanskrit term *bhaj* meaning 'to divide or share.' This suggests an intimate, two-way relationship between the deity and the devotee. *Bhakti* is directed towards Bhagavat, which is often translated as god, but also means one who possesses and shares *bhaga*, literally good fortune or bliss. The devotee, known as the *bhakta* or the *bhagavata*, shares his or her chosen deity's *bhaga*.

### Elsewhere

About 2000 years ago, Christianity emerged in West Asia. Jesus Christ was born in Bethlehem, which was then part of the Roman empire. Christ's teachings were that He was the Saviour of the world. He also taught people to treat others with love and trust others, just as they themselves wanted to be treated. The Christians of Kerala, known as Syrian Christians because they probably came from West Asia, are amongst the oldest Christian communities in the world.

**Important Terms:** **Muvender:** Three chiefs of the Cholas, Cheras and Pandyas. **Silk:** A fine soft thread produced in the cocoon by a silkworm **Kushanas:** A dynasty of central and north-west Asia 2000 years ago. **Mahayana:** A sect of Buddhism. **Theravada:** An older form of Buddhism which was popular in South-East Asia. **Bodhisattva:** Attainment of enlightenment. **Pilgrim:** A wanderer. **Bhakti:** Person's devotion to his or her chosen deity **The Black Gold:** South Indian pepper was very popular in the Roman Empire and was known as the Black Gold.

**Important Dates:** **Around 2300 years ago:** The Cholas, Choras and Pandyas became powerful in South India. **Around 2500 years ago:** The Satavahanas became powerful in Western India. **Around 7000 years ago:** Techniques of making silk were first invented in China. **About 2000 years ago:** Wearing silk became a fashion among rulers and wealthy people in Rome. **Around 1900 years ago:** Kanishka, the most famous Kushana ruler ruled. **About 1600 years ago:** Fa Xian, a Chinese Buddhist pilgrim came to the subcontinent. **Around 1400 years ago:** Xuan Zang, another Chinese Buddhist pilgrim came.



## Chapter 11 New Empires And Kingdoms

### Prashastis and what they tell us

This inscription is of a special kind known as a *prashasti*, a Sanskrit word, meaning 'in praise of'. While *prashastis* were composed for some of the rulers you read about in Chapter 10, such as Gautamiputra Shri Satakarni, they became far more important from the time of the Guptas. We know about Samudragupta from a long inscription, actually a poem in Sanskrit, composed by his court poet, Harishena nearly 1700 years ago. This was inscribed on the Ashokan pillar at Allahabad.

### Samudragupta's prashasti

Let us see what Samudragupta's *prashasti* tells us. The poet praised the king in glowing terms — as a warrior, as a king who won victories in battle, who was learned and the best of poets. He is also described as equal to the gods. The *prashasti* was composed in very long sentences. Here is part of one such sentence:

### Samudragupta the warrior

Whose body was most charming, being covered with the plenteous beauty of the marks of hundreds of scars caused by battle-axes, arrows, spikes, spears, barbed darts, swords, iron clubs, javelins, barbed arrows, long arrows and many other weapons. He was *the king who played the veena*.



This map is based on the information provided in the *prashasti*. Harishena describes four different kinds of rulers, and tells us about Samudragupta's policies towards them.

1. The rulers of *Aryavarta*, the area shaded in green on the map. Here there were nine rulers who were uprooted, and their kingdoms were made a part of Samudragupta's empire.
2. The rulers of *Dakshinapatha*. Here there were twelve rulers, some of whose capitals are marked with red dots on the map. They surrendered to Samudragupta after being defeated and he then allowed them to rule again.
3. The inner circle of neighbouring states, including Assam, coastal Bengal, Nepal, and a number of *ganasanghas* (remember Chapter 6) in the north-west, marked in purple on the map. They brought tribute,

followed his orders, and attended his court.

4. The rulers of the outlying areas, marked in blue on the map, perhaps the descendants of the Kushanas and Shakas, and the ruler of Sri Lanka, who submitted to him and offered daughters in marriage.

Ujjain and Pataliputra (Patna) on the map. These were important centres of the Gupta rulers.

What was the difference between the way in which Samudragupta treated the rulers of Aryavarta and Dakshinapatha? Can you suggest any reasons for this difference?

### Genealogies

Most *prashastis* also mention the ancestors of the ruler. This one mentions Samudragupta's great grandfather, grandfather, father and mother. His mother, Kumara devi, belonged to the Lichchhavi *gana*, while his father, Chandragupta, was the first ruler of the Gupta dynasty to adopt the grand title of *maharaj-adhiraja*, a title that Samudragupta also used. His great grandfather and grandfather are mentioned simply as *maha-rajah*. It seems as if the family gradually rose to importance.

Arrange these titles in order of importance: *raja*, *maharaj-adhiraja*, *maha-rajah*.

Samudragupta in turn figures in the genealogies (lists of ancestors) of later rulers of the dynasty, such as his son, Chandragupta II. We know about him from inscriptions and coins. He led an expedition to western India, where he overcame the last of the Shakas. According to later belief, his court was full of learned people, including Kalidasa the poet, and Aryabhata the astronomer, about whom you will read more in Chapter 12.

### Harshavardhana and the Harshacharita

While we can learn about the Gupta rulers from their inscriptions and coins, we can find out about some kings from biographies. Harshavardhana, who ruled nearly 1400 years ago, was one such ruler. His court poet, Banabhatta, wrote his biography, the *Harshacharita*, in Sanskrit. This gives us the genealogy of Harsha, and ends with his becoming king. Xuan Zang, about whom you read in Chapter 10, also spent a lot of time at Harsha's court and left a detailed account of what he saw.

Harsha was not the eldest son of his father, but became king of Thanesar after both his father and elder brother died. His brother-in-law was the ruler of Kanauj and he was killed by the ruler of Bengal. Harsha took over the kingdom of Kanauj, and then led an army against the ruler of Bengal. Although he was successful in the east, and conquered both Magadha and Bengal, he was not as successful elsewhere. He tried to cross the Narmada to march into the Deccan, but was stopped by a ruler belonging to the Chalukya dynasty, Pulakeshin II.

### The Pallavas, Chalukyas and Pulakeshin's prashasti

The Pallavas and Chalukyas were the most important ruling dynasties in south India during this period. The kingdom of the Pallavas spread from their region around their capital, Kanchipuram, to the Kaveri delta, while that of the Chalukyas was centred around the Raichur Doab, between the rivers Krishna and Tungabhadra.

Aihole, the capital of the Chalukyas, was an important trading centre. It developed as a religious centre, with a number of temples. The Pallavas and Chalukyas frequently raided one another's lands, especially attacking the capital cities, which were prosperous towns.

The best-known Chalukya ruler was Pulakeshin II. We know about him from a *prashasti*, composed by his court

poet Ravikirti. This tells us about his ancestors, who are traced back through four generations from father to son. Pulakeshin evidently got the kingdom from his uncle. According to Ravikirti, he led expeditions along both the west and the east coasts. Besides, he checked the advance of Harsha. There is an interesting play of words in the poem. Harsha means happiness. The poet says that after this defeat, Harsha was no longer Harsha. Pulakeshin also attacked the Pallava king, who took shelter behind the walls of Kanchipuram. But the Chalukya victory was short-lived. Ultimately, both the Pallavas and the Chalukyas gave way to new rulers belonging to the Rashtrakuta and Chola dynasties. Who were the other rulers who tried to control the coasts and why?

### How were these kingdoms administered?

As in the case of earlier kings, land revenue remained important for these rulers, and the village remained the basic unit of administration.

There were some new developments as well. Kings adopted a number of steps to win the support of men who were powerful, either economically, or socially, or because of their political and military strength. For instance:

- Some important administrative posts were now hereditary. This means that sons succeeded fathers to these posts. For example, the poet Harishena was a *maha-danda-nayaka*, or chief judicial officer, like his father.
- Sometimes, one person held many offices. For instance, besides being a *maha-danda-nayaka*, Harishena was a *kumar-amatya*, meaning an important minister, and a *sandhi-vigrahika*, meaning a minister of war and peace.
- Besides, important men probably had a say in local administration. These included the *nagara-shreshthior chief banker or merchant of the city*, the *sarthavaha* or leader of the merchant caravans, the *prathama-kulika* or the *chiefcraftsman*, and the *head of the kayasthas or scribes*.

These policies were reasonably effective, but sooner or later, some of these powerful men grew strong enough to set up independent kingdoms.

What do you think may have been the advantages and disadvantages of having hereditary officers?

### A new kind of army

Like earlier rulers, some of these kings maintained a well-organised army, with elephants, chariots, cavalry and foot soldiers. Besides, there were military leaders who provided the king with troops whenever he needed them. They were not paid regular salaries. Instead, some of them received grants of land. They collected revenue from the land and used this to maintain soldiers and horses, and provide equipment for warfare. These men were known as *samantas*. Whenever the ruler was weak, *samantas* tried to become independent.

### Assemblies in the southern kingdoms

The inscriptions of the Pallavas mention a number of local assemblies. These included the *sabha*, which was an assembly of *brahmin* land owners. This assembly functioned through sub-committees, which looked after irrigation, agricultural operations, making roads, local temples, etc.

The *ur* was a village assembly found in areas where the land owners were not *brahmins*. And the *nagaram* was an organisation of merchants. It is likely that these assemblies were controlled by rich and powerful

landowners and merchants. Many of these local assemblies continued to function for centuries.

### Ordinary people in the kingdoms

We can catch an occasional glimpse of the lives of ordinary people from plays, and other accounts. Let us look at some of these. Kalidasa is known for his plays depicting life in the king's court. An interesting feature about these plays is that the king and most *brahmins* are shown as speaking Sanskrit, while women and men other than the king and *brahmins* use Prakrit. His most famous play, *Abhijnana Shakuntalam*, is the story of the love between a king named Dushyanta and a young woman named Shakuntala. We find an interesting description of the plight of a poor fisherman in this play. The Chinese pilgrim Fa Xian noticed the plight of those who were treated as untouchables by the high and mighty. They were expected to live on the outskirts of the city. He writes: "If such a man enters a town or a market place, he strikes a piece of wood, in order to keep himself separate; people, hearing this sound, know what it means and avoid touching him or brushing against him."

And Banabhatta provides us with a vivid picture of the king's army on the move:

### The king's army

The king travelled with an enormous amount of equipment. Apart from weapons, there were things of daily use such as pots, pans, furniture, golden footstools, food, including animals such as goat, deer, rabbits, vegetables, spices, carried on carts or loaded on to pack animals such as camels and elephants. This huge army was accompanied by musicians beating drums, and others playing horns and trumpets.

Villagers had to provide hospitality along the way. They came with gifts of curds, *gur* and flowers, and provided fodder for the animals. They also tried to meet the king, and place their complaints and petitions before him. The army left a trail of destruction behind. Elephants often trampled down the huts of villagers, and the oxen yoked to the caravans of merchants ran away, scared by the tumult.

As Banabhatta says: "The whole world was swallowed up in dust."

### Elsewhere

Arabia, although it is a desert, it was at the hub of communications for centuries. In fact, Arab merchants and sailors played an important role in the sea trade between Europe. Others who lived in Arabia were the Bedouins, pastoral tribes depending mainly on camels, hardy animals that could survive in the desert. Around 1400 years ago, Prophet Muhammad introduced a new religion, Islam in Arabia. Like Christianity, Islam was a religion that laid stress on the equality and unity of all before Allah, the one supreme god. Here is a verse from the Quran, the sacred book of Islam.

"For Muslim men and women, for believing men and women, for devout men and women, for true men and women, for men and women who are patient and constant, for men and women who humble themselves, for men and women who give in charity, for men and women who fast, for men and women who guard their chastity, and for men and women who engage much in Allah's remembrance, for them has Allah prepared forgiveness and great reward."

Within a hundred years Islam spread to north Africa, Spain, Iran and India. Arab sailors, who were already familiar with the coastal settlements of the



subcontinent, now brought the new religion with them. Arabs soldiers conquered Sind (in present-day Pakistan) about 1300 years ago.

**Important Terms: Prashasti:** Meaning 'in praise of'.

**Aryavarta:** A Samundragupta's empire. **Dakshinapatha:** A surrendered territories of 12 rulers. **Genealogy:** Lineage (oa'kkoyh). **Hereditary:** Transmitted from one generation to another. **Samanta:** An officer for collecting revenue to maintain soldiers and horses.

**Important Dates: About 1700 years ago:** Beginning of the Gupta dynasty. **About 1400 years ago:** The rule of Harshavardhana.

## Chapter 12

### Buildings, Paintings And Books

#### The iron pillar

The iron pillar at Mehrauli, Delhi, is a remarkable example of the skill of Indian crafts persons. It is made of iron, 7.2. m high, and weighs over 3 tonnes. It was made about 1500 years ago. We know the date because there is an inscription on the pillar mentioning a ruler named Chandra, who probably belonged to the Gupta dynasty (Chapter 11). What is amazing is the fact that the pillar has not rusted in all these years.

#### Buildings in brick and stone

The skills of our crafts persons are also apparent in the buildings that have survived, such as *stupas*. The word *stupa* means a mound. While there are several kinds of *stupas*, round and tall, big and small, these have certain common features. Generally, there is a small box placed at the centre or heart of the *stupa*. This may contain bodily remains (such as teeth, bone or ashes) of the Buddha or his followers, or things they used, as well as precious stones, and coins.



*The Great Stupa at Sanchi, Madhya Pradesh. Stupas like this one were built over several centuries. While the brick mound probably dates to the time of Ashoka, the railings and gateways were added during the time of later rulers.*

Often, a path, known as the *pradakshina patha*, was laid around the *stupa*. This was surrounded with railings. Entrance to the path was through gateways. Devotees walked around the *stupa*, in a clockwise direction, as a mark of devotion. Both railings and gateways were often decorated with sculpture.

Amravati was a place where a magnificent *stupa* once existed. Many of the stone carvings for decorating the *stupa* were made about 2000 years ago. Other buildings were hollowed out of rock to make artificial caves. Some of these were very elaborately decorated with sculptures and painted walls.

Some of the earliest Hindu temples were also built at this time. Deities such as Vishnu, Shiva, and Durga were worshipped in these shrines. The most important part of the temple was the room known as the *garbhagriha*, where the image of the chief deity was placed. It was here that priests performed religious rituals, and

devotees offered worship to the deity.

Often, as at Bhitargaon, a tower, known as the *shikhara*, was built on top of the *garbhagriha*, to mark this out as a sacred place. Building *shikharas* required careful planning. Most temples also had a space known as the *mandapa*. It was a hall where people could assemble.



*Monolithic temples at Mahabalipuram. Each of these was carved out of a huge, single piece of stone (that is why they are known as monoliths). While brick structures are built up by adding layers of bricks from the bottom upwards, in this case the stone cutters had to work from top downwards.*

Some of the finest stone temples were built in Mahabalipuram and Aihole towns.

#### Painting

Ajanta is a place where several caves were hollowed out of the hills over centuries. Most of these were monasteries for Buddhist monks, and some of them were decorated with paintings. Here are some examples. As the caves are dark inside, most of these paintings were done in the light of torches. The colours, which are vivid even after 1500 years, were made of plants and minerals. The artists who created these splendid works of art remain unknown.

#### The world of books

Some of the best-known *epics* were written during this period. Epics are grand, long compositions, about heroic men and women, and include stories about gods. A famous Tamil epic, the *Silappadikaram*, was composed by a poet named Ilango, around 1800 years ago. It is the story of a merchant named Kovalan, who lived in Puhar and fell in love with a courtesan named Madhavi, neglecting his wife Kannagi. Later, he and Kannagi left Puhar and went to Madurai, where he was wrongly accused of theft by the court jeweller of the Pandya king. The king sentenced Kovalan to death. Kannagi, who still loved him, was full of grief and anger at this injustice, and destroyed the entire city of Madurai.

#### Recording and preserving old stories

A number of Hindu religious stories that were in circulation earlier were written down around the same time. These include the *Puranas*. *Purana* literally mean old. The *Puranas* contain stories about gods and goddesses, such as Vishnu, Shiva, Durga or Parvati. They also contain details on how they were to be worshipped. Besides, there are accounts about the creation of the world, and about kings.

The *Puranas* were written in simple Sanskrit verse, and were meant to be heard by everybody, including women and *shudras*, who were not allowed to study the *Vedas*. They were probably recited in temples by priests, and people came to listen to them.

Two Sanskrit epics, the *Mahabharata* and *Ramayana* had been popular for a very long time. Some of you may be familiar with these stories. The *Mahabharata* is about



a war fought between the Kauravas and Pandavas, who were cousins. This was a war to gain control of the throne of the Kurus, and their capital, Hastinapura. The story itself was an old one, but was written down in the form in which we know it today, about 1500 years ago. Both the Puranas and the Mahabharata are supposed to have been compiled by Vyasa. The Bhagavad Gita, about which you learnt in Chapter 10, was also included in the Mahabharata.

The Ramayana is about Rama, a prince of Kosala, who was sent into exile. His wife Sita was abducted by the king of Lanka, named Ravana, and Rama had to fight a battle to get her back. He won and returned to Ayodhya, the capital of Kosala, after his victory. Like the Mahabharata, this was an old story that was now written down. Valmiki is recognised as the author of the Sanskrit Ramayana.

There are several versions (many of which are performed) of the Mahabharata and the Ramayana, popular amongst people in different parts of the subcontinent. Find out about a version in your state.

### Stories told by ordinary people

Ordinary people also told stories, composed poems and songs, sang, danced, and performed plays. Some of these are preserved in collections of stories such as the Jatakas and the Panchatantra, which were written down around this time. Stories from the Jatakas were often shown on the railings of *stupas* and in paintings in places such as Ajanta.

### Writing books on science

This was also the time when Aryabhata, a mathematician and astronomer, wrote a book in Sanskrit known as the Aryabhatiyam. He stated that day and night were caused by the rotation of the earth on its axis, even though it seems as if the sun is rising and setting everyday. He developed a scientific explanation for eclipses as well. He also found a way of calculating the circumference of a circle, which is nearly as accurate as the formula we use today.

### Zero

While numerals had been used earlier, mathematicians in India now invented a special symbol for zero. This system of counting was adapted by the Arabs and then spread to Europe. It continues to be in use throughout the world.

The Romans used a system of counting without using zero. Try and find out more about it.

### Elsewhere

Paper has become a part of our daily lives. The books we read are printed on paper, and we use paper for writing. Paper was invented in China about 1900 years ago, by a man named Cai Lun. He beat plant fibres, cloth, rope and the bark of trees, soaked these in water, and then pressed, drained and dried the pulp to create paper. Even today, hand made paper is made through a similar process.

The technique of making paper was a closely guarded secret for centuries. It reached Korea about 1400 years ago, and spread to Japan soon after. It was known in Baghdad about 1800 years ago. From Baghdad it spread to Europe, Africa, and other parts of Asia including the subcontinent.

What were manuscripts in early India made out of? (Hint: See Chapter 1)

**Important Terms:** **Stupa:** A round and tall mound by craftsmen. **Temple:** A place of worship. **Purana:** Compilation of old religious stories. **Silappadikaram:** A poet Ilango composed the Silappadikaram, a Tamil epic, around 1800 years ago. The Silappadikaram is about the story of a merchant and his wife, Kannagi in Madurai. **Monolithic Temples:** Monolithic Temples are the temples that were carved out of a huge single rock.

**Important Dates:** **2300 years ago:** Beginning of stupa building. **2000 years ago:** Amaravati, a place where a magnificent stupa existed. **1600 years ago:** Kalidasa was present. **1500 years ago:** Iron pillar, Temple at Bhitragoon, Paintings of Ajanta and Aryabhata. **1400 years ago:** Durga Temple.

# NCERT Class 7

## History (Our Pasts - II)

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 Tracing Changes Through A Thousand Years

##### New Social and Political Groups

The study of the thousand years between 700 and 1750 is a huge challenge to historians largely because of the scale and variety of developments that occurred over the period. At different moments in this period new technologies made their appearance – like the Persian wheel in irrigation, the spinning wheel in weaving, and firearms in combat. New foods and beverages arrived in the subcontinent – potatoes, corn, chillies, tea and coffee. Remember that all these innovations – new technologies and crops – came along with people, who brought other ideas with them as well. As a result, this was a period of economic, political, social and cultural changes.

This was also a period of great mobility. Groups of people travelled long distances in search of opportunity. The subcontinent held immense wealth and the possibilities for people to carve a fortune. One group of people who became important in this period were the Rajputs, a name derived from “Rajaputra”, the son of a ruler. Between the eighth and fourteenth centuries the term was applied more generally to a group of warriors who claimed Kshatriya caste status.

The term included not just rulers and chieftains but also soldiers and commanders who served in the armies of different monarchs all over the subcontinent. A chivalric code of conduct – extreme valour and a great sense of loyalty – were the qualities attributed to Rajputs by their poets and bards. Other groups of people such as the Marathas, Sikhs, Jats, Ahoms and Kayasthas (a caste of scribes and secretaries) also used the opportunities of the age to become politically important.

**Habitat** Refers to the environment of a region and the social and economic lifestyle of its residents. Changes in their **habitat** forced many forest-dwellers to migrate. Others started tilling the land and became peasants. These new peasant groups gradually began to be influenced by regional markets, chieftains, priests, monasteries and temples. They became part of large, complex societies, and were required to pay taxes and offer goods and services to local lords. As a result, significant economic and social differences emerged amongst peasants. Some possessed more productive land, others also kept cattle, and some combined artisanal work with agricultural activity during the lean season. As society became more differentiated, people were grouped into jatis or sub-castes and ranked on the basis of their backgrounds and their occupations. Ranks were not fixed permanently, and varied according to the power, influence and resources controlled by members of the jati. The status of the same jati could vary from area to area.

Jatis framed their own rules and regulations to manage the conduct of their members. These regulations were enforced by an assembly of elders, described in some areas as the jati panchayat. But jatis were also required to follow the rules of their villages. Several villages were governed by a chieftain. Together they were only one small unit of a state.

##### Region and Empire

Large states like those of the Cholas, Tughluqs or Mughals encompassed many regions. A Sanskrit prashasti praising the Delhi Sultan Ghiyasuddin Balban (1266-1287) explained that he was the ruler of a vast empire that stretched from Bengal (Gauda) in the east to Ghazni (Gajjana) in Afghanistan in the west and included all of south India (Dravida). People of different regions – Gauda, Andhra, Kerala, Karnataka, Maharashtra and Gujarat – apparently fled before his armies. Historians regard these as exaggerated claims of conquests. At the same time, they try to understand why rulers kept claiming to have control over different parts of the subcontinent.

##### Language and region

*In 1318 the poet Amir Khusrau noted that there was a different language in every region of this land: Sindhi, Lahori, Kashmiri, Dvarsamudri (in southern Karnataka), Telangani (in Andhra Pradesh), Gujarati (in Gujarat), Ma'bari (in Tamil Nadu), Gauri, (in Bengal) ... Awadhi (in eastern Uttar Pradesh) and Hindawi (in the area around Delhi).*

Amir Khusrau went on to explain that in contrast to these languages there was Sanskrit which did not belong to any region. It was an old language and “common people do not know it, only the Brahmanas do”.

Make a list of the languages mentioned by Amir Khusrau. Prepare another list of the names of languages spoken today in the regions he mentioned. Underline names that are similar and circle those that are different. By 700 many regions already possessed distinct geographical dimensions and their own language and cultural characteristics. You will learn more about these in Chapter 9. They were also associated with specific ruling dynasties. There was considerable conflict between these states. Occasionally dynasties like the Cholas, Khaljis, Tughluqs and Mughals were able to build an empire that was pan-regional – spanning diverse regions. Not all these empires were equally stable or successful.

When the Mughal Empire declined in the eighteenth century, it led to the re-emergence of regional states. But years of imperial, pan-regional rule had altered the character of the regions. Across most of the subcontinent the regions were left with the legacies of the big and small states that had ruled over them. This was apparent in the emergence of many distinct and shared traditions: in the realms of governance, the management of the economy, elite cultures, and language. Through the thousand years between 700 and 1750 the character of the different regions did not grow

in isolation. These regions felt the impact of larger pan-regional forces of integration without ever quite losing their distinctiveness.

### Old and New Religions

The thousand years of history that we are exploring witnessed major developments in religious traditions. People's belief in the divine was sometimes deeply personal, but more usually it was collective. Collective belief in a supernatural agency – religion – was often closely connected with the social and economic organisation of local communities. As the social worlds of these groups altered so too did their beliefs.

• *Do you remember what Amir Khusrau had to say regarding Sanskrit, knowledge and Brahmanas?*

It was during this period that important changes occurred in what we call Hinduism today. These included the worship of new deities, the construction of temples by royalty and the growing importance of Brahmanas, the priests, as dominant groups in society. Their knowledge of Sanskrit texts earned the Brahmanas a lot of respect in society. Their dominant position was consolidated by the support of their **patrons** – new rulers searching for prestige.

### Patron

An influential, wealthy individual who supports another person – an artiste, a craftsperson, a learned man, or a noble.

One of the major developments of this period was the emergence of the idea of bhakti – of a loving, personal deity that devotees could reach without the aid of priests or elaborate rituals.

This was also the period when new religions appeared in the subcontinent. Merchants and migrants first brought the teachings of the holy Quran to India in the seventh century. Muslims regard the Quran as their holy book and accept the sovereignty of the one God, Allah, whose love, mercy and bounty embrace all those who believe in Him, without regard to social background. Many rulers were patrons of Islam and the ulama – learned theologians and jurists. And like Hinduism, Islam was interpreted in a variety of ways by its followers. There were the Shia Muslims who believed that the Prophet Muhammad's son-in-law, Ali, was the legitimate leader of the Muslim community, and the Sunni Muslims who accepted the authority of the early leaders (Khalifas) of the community, and the succeeding Khalifas. There were other important differences between the various schools of law (Hanafi and Shafi'i mainly in India), and in theology and mystic traditions.

### Thinking about Time and Historical Periods

Time reflects changes in social and economic organisation, in the persistence and transformation of ideas and beliefs. The study of time is made somewhat easier by dividing the past into large segments – periods – that possess shared characteristics.

In the middle of the nineteenth century British historians divided the history of India into three periods: "Hindu", "Muslim" and "British". This division was based on the idea that the religion of rulers was the only important historical change, and that there were no other significant developments – in the economy, society or culture. Such a division also ignored the rich diversity of the subcontinent.

Few historians follow this periodisation today. Most look to economic and social factors to characterise the major elements of different moments of the past. The histories you read last year included a wide range of early societies – hunter-gatherers, early farmers, people living in towns and villages, and early empires and

kingdoms. The histories you will be studying this year are often described as "medieval". You will find out more about the spread of peasant societies, the rise of regional and imperial state formations – sometimes at the cost of pastoral and forest people – the development of Hinduism and Islam as major religions and the arrival of European trading companies. These thousand years of Indian history witnessed considerable change. After all, the sixteenth and eighteenth centuries were quite different from the eighth or the eleventh. Therefore, describing the entire period as one historical unit is not without its problems. Moreover, the "medieval" period is often contrasted with the "modern" period. "Modernity" carries with it a sense of material progress and intellectual advancement. This seems to suggest that the medieval period was lacking in any change whatsoever. But of course we know this was not the case.

During these thousand years the societies of the subcontinent were transformed often and economies in several regions reached a level of prosperity that attracted the interest of European trading companies. As you read this book, look out for signs of change and the historical processes at work. Also, whenever you can, compare what you read in this book with what you read last year. Look out for changes and continuities wherever you can, and look at the world around you to see what else has changed or remained the same.

**Important Terms:** **Manuscripts:** A hand written book. **Jati:** A jati is group of people who have their identity on the basis of their background and occupation. **Periodisation:** The process of dividing the past into large segments. They are known as periods and each period possess shared characteristics. **Persian wheel** a wheel used to draw water for irrigation in medieval times.

**Important Dates: 1154 AD:** Al-idrisi made a map of Indian subcontinent. **1266-1287:** Reign of Ghiyasuddin Balban. **1356:** Ziauddin Barani wrote his first Chronicle, another version two years later.

## Chapter 2 New Kings And Kingdoms

Many new dynasties emerged after the seventh century. Locate the Gurjara-Pratiharas, Rashtrakutas, Palas, Cholas and Chahamanas (Chauhans). Can you identify the present-day states over which they exercised control?

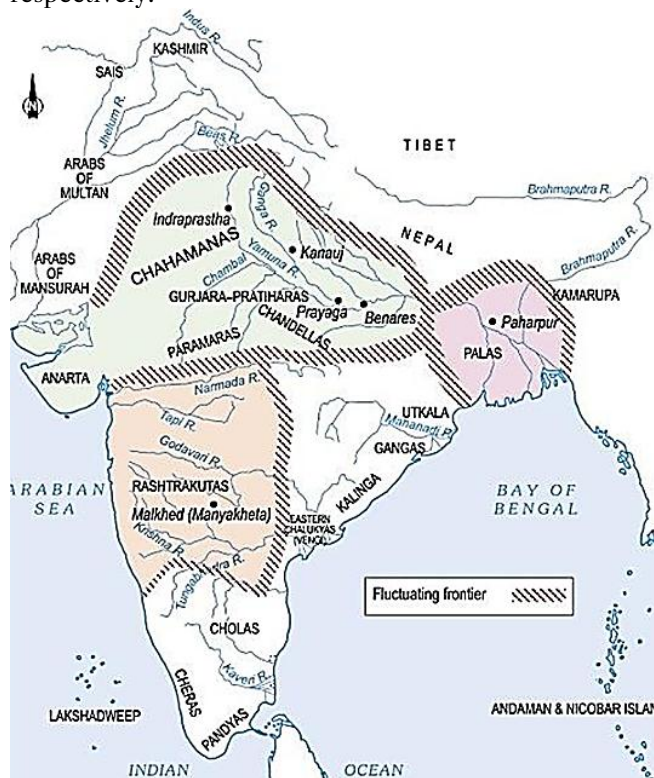
### The Emergence of New Dynasties

By the seventh century there were big landlords or warrior chiefs in different regions of the subcontinent. Existing kings often acknowledged them as their subordinates or samantas. They were expected to bring gifts for their kings or overlords, be present at their courts and provide them with military support. As samantas gained power and wealth, they declared themselves to be maha-samanta, maha-mandaleshvara (the great lord of a "circle" or region) and so on. Sometimes they asserted their independence from their overlords.

One such instance was that of the Rashtrakutas in the Deccan. Initially they were subordinate to the Chalukyas of Karnataka. In the mid-eighth century, Dantidurga, a Rashtrakuta chief, overthrew his Chalukya overlord and performed a ritual called hiranya-garbha (literally, the golden womb). When this ritual was performed with the help of Brahmanas, it was thought to lead to the "rebirth" of the sacrificer as a Kshatriya, even if he was not one by birth.



In other cases, men from enterprising families used their military skills to carve out kingdoms. For instance, the Kadamba Mayurasharma and the Gurjara-Pratihara Harichandra were Brahmanas who gave up their traditional professions and took to arms, successfully establishing kingdoms in Karnataka and Rajasthan respectively.



Map 1: Major kingdoms, seventh-twelfth centuries?

### Administration in the Kingdoms

Many of these new kings adopted high-sounding titles such as maharaja-adhiraja (great king, overlord of kings), tribhuvana-chakravartin (lord of the three worlds) and so on. However, in spite of such claims, they often shared power with their samantas as well as with associations of peasants, traders and Brahmanas. In each of these states, resources were obtained from the producers – that is, peasants, cattle-keepers, artisans – who were often persuaded or compelled to surrender part of what they produced. Sometimes these were claimed as “rent” due to a lord who asserted that he owned the land. Revenue was also collected from traders.

### Four hundred taxes

The inscriptions of the Cholas who ruled in Tamil Nadu refer to more than 400 terms for different kinds of taxes. The most frequently mentioned tax is vetti, taken not in cash but in the form of forced labour, and kadamai, or land revenue. There were also taxes on thatching the house, the use of a ladder to climb palm trees, a cess on succession to family property, etc. These resources were used to finance the king's establishment, as well as for the construction of temples and forts. They were also used to fight wars, which were in turn expected to lead to the acquisition of wealth in the form of plunder, and access to land as well as trade routes. The functionaries for collecting revenue were generally recruited from influential families, and positions were often hereditary. This was true about the army as well. In many cases, close relatives of the king held these positions.

### Prashastis and Land Grants

Prashastis contain details that may not be literally true. But they tell us how rulers wanted to depict themselves – as valiant, victorious warriors, for example. These were composed by learned Brahmanas, who occasionally helped in the administration.

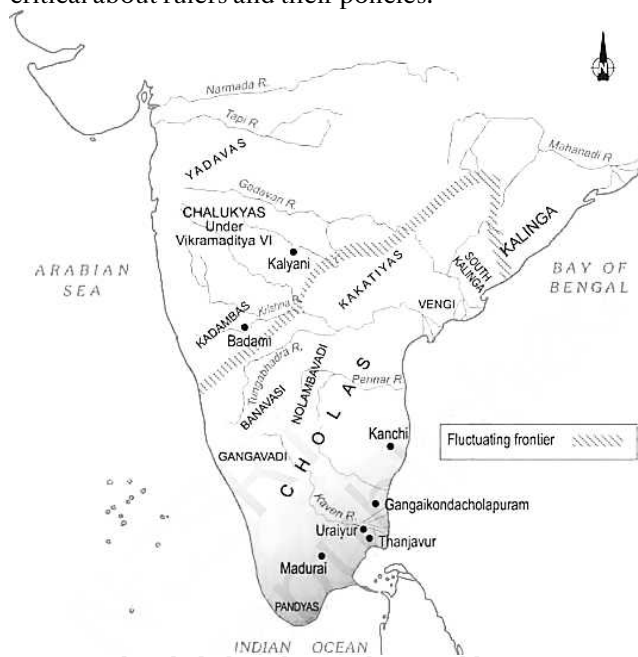
### The “achievements” of Nagabhata:

Many rulers described their achievements in prashastis. One prashasti, written in Sanskrit and found in Gwalior, Madhya Pradesh, describes the exploits of Nagabhata, a Pratihara king, as follows:

*The kings of Andhra, Saindhava (Sind), Vidarbha (part of Maharashtra) and Kalinga (part of Orissa) fell before him even as he was a prince ... He won a victory over Chakrayudha (the ruler of Kanauj) ... He defeated the king of Vanga (part of Bengal), Anarta (part of Gujarat), Malava (part of Madhya Pradesh), Kirata (forest peoples), Turushka (Turks), Vatsa, Matsya (both kingdoms in north India) ...*

Kings often rewarded Brahmanas by grants of land. These were recorded on copper plates, which were given to those who received the land.

A long Sanskrit poem composed by Kalhan contains the history of kings who ruled over Kashmir. He used a variety of sources, including inscriptions, documents, eyewitness accounts and earlier histories, to write his account. Unlike the writers of prashastis, he was often critical about rulers and their policies.



Map 2: The Chola kingdom and its neighbour

### Warfare for Wealth

You may have noticed that each of these ruling dynasties was based in a specific region. At the same time, they tried to control other areas. One particularly prized area was the city of Kanauj in the Ganga valley. For centuries, rulers belonging to the Gurjara-Pratihara, Rashtrakuta and Pala dynasties fought for control over Kanauj. Because there were three “parties” in this long-drawn conflict, historians often describe it as the “tripartite struggle”.

Rulers also tried to demonstrate their power and resources by building large temples. So, when they attacked one another's kingdoms, they often chose to target temples, which were sometimes extremely rich. One of the best known of such rulers is **Sultan** Mahmud of Ghazni, Afghanistan. He ruled from 997 to 1030, and extended control over parts of Central Asia, Iran and the north-western part of the subcontinent. He raided the

subcontinent almost every year – his targets were wealthy temples, including that of Somnath, Gujarat.

### Sultan

Is an Arabic term meaning ruler. Much of the wealth Mahmud carried away was used to create a splendid capital city at Ghazni. He was interested in finding out more about the people he conquered, and entrusted a scholar named al-Biruni to write an account of the subcontinent. This Arabic work, known as the *Kitab al-Hind*, remains an important source for historians. He consulted Sanskrit scholars to prepare this account. Other kings who engaged in warfare included the Chahamanas, later known as the Chauhans, who ruled over the region around Delhi and Ajmer. They attempted to expand their control to the west and the east, where they were opposed by the Chalukyas of Gujarat and the Gahadavalas of western Uttar Pradesh. The best-known Chahamana ruler was Prithviraja III (1168-1192), who defeated an Afghan ruler named Sultan Muhammad Ghori in 1191, but lost to him the very next year, in 1192.

### A Closer Look: The Cholas From Uraiyur to Thanjavur

How did the Cholas rise to power? A minor chiefly family known as the Muttaraiyar held power in the Kaveri delta. They were subordinate to the Pallava kings of Kanchipuram. Vijayalaya, who belonged to the ancient chiefly family of the Cholas from Uraiyur, captured the delta from the Muttaraiyar in the middle of the ninth century. He built the town of Thanjavur and a temple for goddess Nishumbhasudini there. The successors of Vijayalaya conquered neighbouring regions and the kingdom grew in size and power. The Pandyan and the Pallava territories to the south and north were made part of this kingdom. Rajaraja I, considered the most powerful Chola ruler, became king in 985 and expanded control over most of these areas. He also reorganised the administration of the empire. Rajaraja's son Rajendra I continued his policies and even raided the Ganga valley, Sri Lanka and countries of Southeast Asia, developing a navy for these expeditions.

### Splendid Temples and Bronze Sculpture

The big temples of Thanjavur and Gangaikondacholapuram, built by Rajaraja and Rajendra, are architectural and sculptural marvels. Chola temples often became the nuclei of settlements which grew around them. These were centres of craft production. Temples were also endowed with land by rulers as well as by others. The produce of this land went into maintaining all the specialists who worked at the temple and very often lived near it – priests, garland makers, cooks, sweepers, musicians, dancers, etc. In other words, temples were not only places of worship; they were the hub of economic, social and cultural life as well.

Amongst the crafts associated with temples, the making of bronze images was the most distinctive. Chola bronze images are considered amongst the finest in the world. While most images were of deities, sometimes images were made of devotees as well.

### Agriculture and Irrigation

Many of the achievements of the Cholas were made possible through new developments in agriculture in Kaveri basin and particularly in the cultivation of rice. Although agriculture had developed earlier in other parts of Tamil Nadu, it was only from the fifth or sixth century that this area was opened up for large-scale cultivation.

Remember that irrigation works require planning –

organising labour and resources, maintaining these works and deciding on how water is to be shared.

### The Administration of the Empire

How was the administration organised? Settlements of peasants, known as *ur*, became prosperous with the spread of irrigation agriculture. Groups of such villages formed larger units called *nadu*. The village council and the *nadu* performed several administrative functions including dispensing justice and collecting taxes. Rich peasants of the Vellala caste exercised considerable control over the affairs of the *nadu* under the supervision of the central Chola government. The Chola kings gave some rich landowners titles like *muvendavelan* (a *velan* or peasant serving three kings), *araiyar* (chief), etc. as markers of respect, and entrusted them with important offices of the state at the centre.

### Types of land

Chola inscriptions mention several categories of land: *Vellanvagai*-land of non-Brahmana peasant proprietors *Brahmadeya*-land gifted to Brahmanas *Shalabhoga*-land for the maintenance of a school *devadana*, *tirunamattukkani*-land gifted to temples *pallichchhandam*-land donated to Jaina institutions We have seen that Brahmanas often received land grants or *brahmadeya*. As a result, a large number of Brahmana settlements emerged in the Kaveri valley as in other parts of south India.

Each *brahmadeya* was looked after by an assembly or *sabha* of prominent Brahmana landholders. These assemblies worked very efficiently. Their decisions were recorded in detail in inscriptions, often on the stone walls of temples. Associations of traders known as *nagarams* also occasionally performed administrative functions in towns.

Inscriptions from Uttaramerur in Chingleput district, Tamil Nadu, provide details of the way in which the *sabha* was organised. The *sabha* had separate committees to look after irrigation works, gardens, temples, etc. Names of those eligible to be members of these committees were written on small tickets of palm leaf; these tickets were put into an earthenware pot, from which a young boy was asked to take out the tickets, one by one for each committee.

### Inscriptions and texts:

Who could be a member of a *sabha*? The Uttaramerur inscription lays down:

*All those who wish to become members of the sabha should be owners of land from which land revenue is collected.*

*They should have their own homes. They should be between 35 and 70 years of age. They should have knowledge of the Vedas. They should be well-versed in administrative matters and honest. If anyone has been a member of any committee in the last three years, he cannot become a member of another committee. Anyone who has not submitted his accounts, and those of his relatives, cannot contest the elections.*

While inscriptions tell us about kings and powerful men, here is an excerpt from the *Periyapuramam*, a twelfth-century Tamil work, which informs us about the lives of ordinary men and women.

### China under the Tang dynasty

In China, an empire was established under the Tang dynasty, which remained in power for about 300 years (from the seventh to the tenth centuries). Its capital, Xi'an, was one of the largest cities in the world, visited by Turks, Iranians, Indians, Japanese and Koreans. The Tang empire was administered by a bureaucracy recruited through an examination, which was open to all



who wished to appear for it. This system of selecting officials remained in place, with some changes, till 1911. In what ways was this system different from those prevalent in the Indian subcontinent?

**Important Terms:** **Samanta:** Big landlords or warrior chiefs who were subordinate of king **Nadu:** A group of villages **Sabha:** A assembly of prominent Brahmana landholders **Tripartite Struggle:** -The kingdoms Gurjaras-Pratihara, Pala and Rashtrakuta dynasties were in constant struggle to acquire control over Kanauj, termed as 'Tripartite Struggle'. **Ur, Nadu, Sabha and Samiti** - Chola kingdom was administered through assemblies

**Important Dates:** **7th century:** Emergence of new dynasties **Mid 8th century:** Rise of Rashtrakutas **1985:** Rajaraja I Chola became ruler **1168-1192:** Rule of Prithviraja III around Delhi **1191:** Prithviraja III defeated Muhammad Ghori **1192:** Prithviraja was defeated by Muhammad Ghori and died

## Chapter 3 The Delhi Sultans

Delhi became an important city only in the twelfth century. Delhi first became the capital of a kingdom under the Tomara Rajputs, who were defeated in the middle of the twelfth century by the Chauhans (also referred to as Chahamanas) of Ajmer. It was under the Tomaras and Chauhans that Delhi became an important commercial centre. Many rich Jaina merchants lived in the city and constructed several temples. Coins minted here, called dehlival, had a wide circulation. The transformation of Delhi into a capital that controlled vast areas of the subcontinent started with the foundation of the Delhi Sultanate in the beginning of the thirteenth century.

### The rulers of Delhi

Although inscriptions, coins and architecture provide a lot of information, especially valuable are "histories", *tarikh* (singular)/*tawarikh* (plural), written in Persian, the language of administration under the Delhi Sultans. The authors of *tawarikh* were learned men: secretaries, administrators, poets and courtiers, who both recounted events and advised rulers on governance, emphasising the importance of just rule.

Keep the following additional details in mind: (1) the authors of *tawarikh* lived in cities (mainly Delhi) and hardly ever in villages. (2) They often wrote their histories for Sultans in the hope of rich rewards. (3) These authors advised rulers on the need to preserve an "ideal" social order based on **birthright** and **gender distinctions**. Their ideas were not shared by everybody.

In 1236 Sultan Iltutmish's daughter, Raziyya, became Sultan. The chronicler of the age, Minhaj-i Siraj, recognised that she was more able and qualified than all her brothers. But he was not comfortable at having a queen as ruler as it is against Islam & God. Nor were the nobles happy at her attempts to rule independently. She was removed from the throne in 1240.

On her inscriptions and coins Raziyya mentioned that she was the daughter of Sultan Iltutmish. This was in contrast to the queen Rudramadevi (1262-1289), of the Kakatiya dynasty of Warangal, part of modern Andhra Pradesh. Rudramadevi changed her name on her inscriptions and pretended she was a man. Another queen, Didda, ruled in Kashmir (980-1003). Her title is interesting: it comes from "didi" or "elder sister", an obviously affectionate term given to a loved ruler by her subjects. Express Minhaj's ideas in your own words.

Do you think Raziyya shared these ideas? Why do you think it was so difficult for a woman to be a ruler?

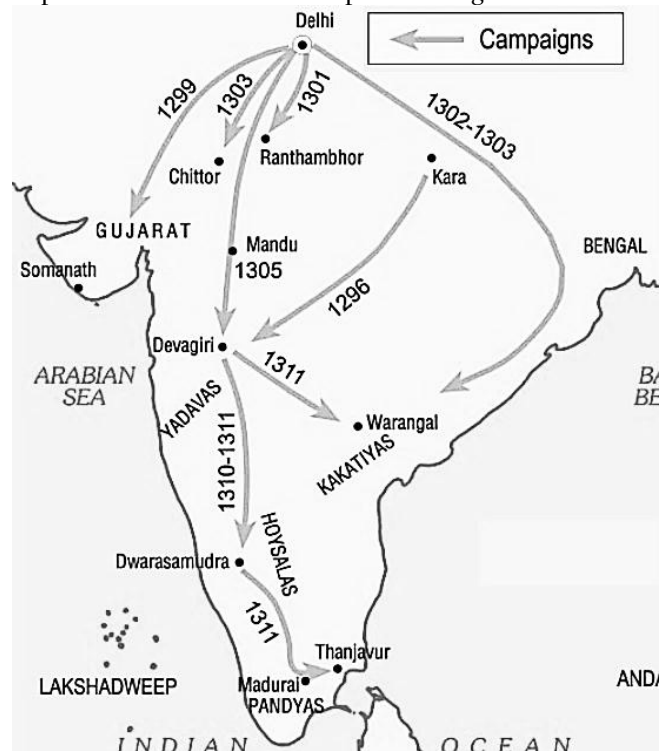
### From Garrison Town to Empire: The Expansion of the Delhi Sultanate

In the early thirteenth century the control of the Delhi Sultans rarely went beyond heavily fortified towns occupied by garrisons. The Sultans seldom controlled the **hinterland** of the cities and were therefore dependent upon trade, tribute or plunder for supplies.

**(Hinterland:** The lands adjacent to a city or port that supply it with goods and services.)

Controlling **garrison towns** in distant Bengal and Sind from Delhi was extremely difficult. Rebellion, war, even bad weather could snap fragile communication routes. Delhi's authority was also challenged by Mongol invasions from Afghanistan and by governors who rebelled at any sign of the Sultan's weakness. The Sultanate barely survived these challenges. Its expansion occurred during the reigns of Ghiyasuddin Balban, Alauddin Khalji and Muhammad Tughluq.

**(Garrison town:** A fortified settlement, with soldiers.) The first set of campaigns along the "internal frontier" of the Sultanate aimed at consolidating the hinterlands of the garrison towns. During these campaigns forests were cleared in the Ganga-Yamuna doab and hunter-gatherers and pastoralists expelled from their habitat. These lands were given to peasants and agriculture was encouraged. New fortresses and towns were established to protect trade routes and to promote regional trade.



Alauddin Khalji's campaign into south India.

The second expansion occurred along the "external frontier" of the Sultanate. Military expeditions into southern India started during the reign of Alauddin Khalji and culminated with Muhammad Tughluq. In their campaigns, Sultanate armies captured elephants, horses and slaves and carried away precious metals. By the end of Muhammad Tughluq's reign, 150 years after somewhat humble beginnings, the armies of the Delhi Sultanate had marched across a large part of the subcontinent. They had defeated rival armies and seized cities. The Sultanate collected taxes from the peasantry and dispensed justice in its realm. But how complete and effective was its control over such a vast territory?



## The Masjid

A mosque is called a masjid in Arabic, literally a place where a Muslim prostrates in reverence to Allah. In a “congregational mosque” (masjid-i-jami or jama masjid) Muslims read their prayers (namaz) together. Members of the congregation choose the most respected, learned male as their leader (imam) for the rituals of prayer. He also delivers the sermon (khutba) during the Friday prayer. *Moth ki Masjid, built in the reign of Sikandar Lodi by his minister.*

*Qutub al-Islam mosque and minaret, built during the last decade of the twelfth century. This was the congregational mosque of the first city built by the Delhi Sultans, described in the chronicles as Dehli-i- Kuhna (the old city). The mosque was enlarged by Iltutmish and Alauddin Khalji. The minar was built by two Sultans: Qutbuddin Aybak and Iltutmish.*

*Begumpuri mosque, built in the reign of Muhammad Tughluq, was the main mosque of Jahanpanah, the “Sanctuary of the World”, his new capital in Delhi. Mosque of Jamali Kamali, built in the late 1520s.*

## A Closer Look: Administration and Consolidation under the Khaljis and Tughluqs

The consolidation of a kingdom as vast as the Delhi Sultanate needed reliable governors and administrators. Rather than appointing aristocrats and landed chieftains as governors, the early Delhi Sultans, especially Iltutmish, favoured their special slaves purchased for military service, called bandagan in Persian. They were carefully trained to man some of the most important political offices in the kingdom. Since they were totally dependent upon their master, the Sultan could trust and rely upon them.

### Slaves rather than sons

Wise men have said that a worthy and experienced slave is better than a son ...” Can you think of any reason why a slave would be better than a son?

The Khaljis and Tughluqs continued to use bandagan and also raised people of humble birth, who were often their clients, to high political positions. They were appointed as generals and governors. However, this also introduced an element of political instability.

Slaves and **clients** were loyal to their masters and patrons, but not to their heirs. New Sultans had their own servants. As a result the accession of a new monarch often saw conflict between the old and the new nobility. The patronage of these humble people by the Delhi Sultans also shocked many elites and the authors of Persian tawarikh criticised the Delhi Sultans for appointing the “low and base-born” to high offices. A **Client** is someone who is under the protection of another; a dependent or hanger-on.

### Officials of Sultan Muhammad Tughluq

Sultan Muhammad Tughluq appointed Aziz Khummar, a wine distiller, Firuz Hajjam, a barber, Manka Tabbakh, a cook, and two gardeners, Ladha and Pira, to high administrative posts. Ziyauddin Barani, a mid-fourteenth-century chronicler, reported their appointments as a sign of the Sultan’s loss of political judgement and his incapacity to rule.

*Why do you think Barani criticised the Sultan?*

Like the earlier Sultans, the Khalji and Tughluq monarchs appointed military commanders as governors of territories of varying sizes. These lands were called iqta and their holder was called iqtadar or muqti. The duty of the muqtis was to lead military campaigns and maintain law and order in their iqtas. In exchange for their military services, the muqtis collected the revenues of their assignments as salary. They also paid

their soldiers from these revenues. Control over muqtis was most effective if their office was not inheritable and if they were assigned iqtas for a short period of time before being shifted. These harsh conditions of service were rigorously imposed during the reigns of Alauddin Khalji and Muhammad Tughluq. Accountants were appointed by the state to check the amount of revenue collected by the muqtis. Care was taken that the muqti collected only the taxes prescribed by the state and that he kept the required number of soldiers.

As the Delhi Sultans brought the hinterland of the cities under their control, they forced the landed chieftains – the samanta aristocrats – and rich landlords to accept their authority. Under Alauddin Khalji the state brought the assessment and collection of land revenue under its own control. The rights of the local chieftains to levy taxes were cancelled and they were also forced to pay taxes. The Sultan’s administrators measured the land and kept careful accounts. Some of the old chieftains and landlords served the Sultanate as revenue collectors and assessors. There were three types of taxes: (1) on cultivation called kharaj and amounting to about 50 per cent of the peasant’s produce, (2) on cattle and (3) on houses.

It is important to remember that large parts of the subcontinent remained outside the control of the Delhi Sultans. It was difficult to control distant provinces like Bengal from Delhi and soon after annexing southern India, the entire region became independent. Even in the Gangetic plain there were forested areas that Sultanate forces could not penetrate. Local chieftains established their rule in these regions. Sometimes rulers like Alauddin Khalji and Muhammad Tughluq could force their control in these areas but only for a short duration.

### Chieftains and their fortifications

Ibn Battuta, a fourteenth-century traveller from Morocco, Africa, explained that chieftains sometimes fortified themselves in mountains, in rocky, uneven and rugged places as well as in bamboo groves. In India the bamboo is not hollow; it is big. Its several parts are so intertwined that even fire cannot affect them, and they are on the whole very strong. The chieftains live in these forests which serve them as ramparts, inside which are their cattle and their crops. There is also water for them within, that is, rain water which collects there. Hence they cannot be subdued except by powerful armies, who entering these forests, cut down the bamboos with specially prepared instruments. The Mongols under Genghis Khan invaded Transoxiana in north-east Iran in 1219 and the Delhi Sultanate faced their onslaught soon after. Mongol attacks on the Delhi Sultanate increased during the reign of Alauddin Khalji and in the early years of Muhammad Tughluq’s rule. This forced the two rulers to mobilise a large standing army in Delhi which posed a huge administrative challenge. Let us see how the two Sultans dealt with this. In this list of Muhammad Tughluq’s failures we sometimes forget that for the first time in the history of the Sultanate, a Delhi Sultan planned a campaign to capture Mongol territory. Unlike Alauddin’s defensive measures, Muhammad Tughluq’s measures were conceived as a part of a military offensive against the Mongols.

Alauddin Khalji Muhammad Tughluq Delhi was attacked twice, in 1299/1300 and 1302-1303. As a defensive measure, Alauddin Khalji raised a large standing army. The Sultanate was attacked in the early years of Muhammad Tughluq’s reign. The Mongol army

was defeated. Muhammad Tughluq was confident about the strength of his army and his resources to plan an attack on Transoxiana. He therefore raised a large standing army. Alauddin constructed a new garrison town named Siri for his soldiers. Rather than constructing a new garrison town, the oldest of the four cities of Delhi (Dehli-i Kuhna) was emptied of its residents and the soldiers garrisoned there. The residents of the old city were sent to the new capital of Daulatabad in the south. The soldiers had to be fed. This was done through the produce collected as tax from lands between the Ganga and Yamuna. But to meet the expense of maintaining such a large number of soldiers the Sultan levied additional taxes. This coincided with famine in the area. The soldiers had to be paid. Alauddin chose to pay his soldiers salaries in cash rather than iqta. The soldiers would buy their supplies from merchants in Delhi and it was thus feared that merchants would raise their prices. To stop this, Alauddin controlled the prices of goods in Delhi. Prices were carefully surveyed by officers, and merchants who did not sell at the prescribed rates were punished. Muhammad Tughluq also paid his soldiers cash salaries. But instead of controlling prices, he used a “token” currency, somewhat like present-day paper currency, but made out of cheap metals, not gold and silver. People in the fourteenth century did not trust these coins. They were very smart: they saved their gold and silver coins and paid all their taxes to the state with this token currency. This cheap currency could also be counterfeited easily. Alauddin’s administrative measures were quite successful and chroniclers praised his reign for its cheap prices and efficient supplies of goods in the market. He successfully withstood the threat of Mongol invasions. Muhammad Tughluq’s administrative measures were a failure. His campaign into Kashmir was a disaster. He then gave up his plans to invade Transoxiana and disbanded his large army. Meanwhile, his administrative measures created complications. The shifting of people to Daulatabad was resented. The raising of taxes and famine in the Ganga-Yamuna belt led to widespread rebellion. And finally, the “token” currency had to be recalled.

### The Sultanate in the Fifteenth and Sixteenth Centuries

Take a look at Table 1 again. You will notice that after the Tughluqs, the Sayyid and Lodi dynasties ruled from Delhi and Agra until 1526. By then, Jaunpur, Bengal, Malwa, Gujarat, Rajasthan and the entire south India had independent rulers who established flourishing states and prosperous capitals. This was also the period which saw the emergence of new ruling groups like the Afghans and the Rajputs.

Some of the states established in this period were small but powerful and extremely well administered. Sher Shah Sur (1540-1545) started his career as the manager of a small territory for his uncle in Bihar and eventually challenged and defeated the Mughal emperor Humayun (1530-1540, 1555-1556). Sher Shah captured Delhi and established his own dynasty. Although the Suri dynasty ruled for only fifteen years (1540-1555), it introduced an administration that borrowed elements from Alauddin Khalji and made them more efficient. Sher Shah’s administration became the model followed by the great emperor Akbar (1556-1605) when he consolidated the Mughal Empire.

### The “Three Orders”, the “Peace of God”, Knights and the Crusades

The idea of the “Three Orders” was first formulated in

France in the early eleventh century. It divided society into three classes: those who prayed, those who fought, and those who tilled the land. This division of society into “Three Orders” was supported by the Church to consolidate its dominant role in society. This helped the emergence of a new warrior group called Knights. The Church patronised this group and used them to propagate their idea of “Peace of God”. The attempt was to direct warriors away from conflict amongst themselves and send them instead on a campaign against the Muslims who had captured the city of Jerusalem. This led to a series of campaigns called the Crusades. These campaigns in the service of God and the Church completely altered the status of Knights. Originally, these Knights did not belong to the class of nobles. But by the end of the eleventh century in France, and a century later in Germany, the humble origins of these warriors were forgotten. By the twelfth century, nobles also wanted to be known as Knights.

**Important Terms:** **Manuscripts:** A book, document, or piece of music written by hand rather than typed or printed **Iqta:** Territories governed by military commanders in sultanate period **Tarikh:** Sultanate history written in Persian **Garrison:** Soldiers **Kharaj:** The tax on cultivation, which was about 50 percent of the peasants’ produce **Bandagans:** The slaves purchased for military service are called bandagan in Persian **Sijdah:** A form of salutation in which the person concerned had to kneel down and touch the ground with his forehead **Ulemas:** Scholars of Islamic learning who were generally orthodox in their outlook and thinking **Paibos:** It was a Persian custom of kissing the feet of the Sultan **Jagir:** A piece of land given to the officials of the Kingdom **Patwari:** The officer who kept the local and revenue record **Jital:** A copper made coin **Sikandar-i-sahi:** The title adopted by Alauddin Khalji **Tanka:** A silver coin introduced by Iltutmish **Important Dates:** **Early 12th century:** Reign of Tomara Rajputs **1175-1192:** Reign of Prithviraj Chauhan **1206-1210:** Reign of Qutbuddin Aybak **1236-1240:** Reign of Raziyya Sultan **1296-1316:** Reign of Alauddin Khalji **1324-1351:** Reign of Muhammad Tughluq **1351-1388:** Reign of Firuz Shah Tughluq **1414-1421:** Reign of Khizr Khan of Sayyid Dynasty **1451-1489:** Reign of Bahlul Lodi

## Chapter 4 The Mughal Empire

Ruling as large a territory as the Indian subcontinent with such a diversity of people and cultures was an extremely difficult task for any ruler to accomplish in the Middle Ages. Quite in contrast to their predecessors, the Mughals created an empire and accomplished what had hitherto seemed possible for only short periods of time. From the latter half of the sixteenth century they expanded their kingdom from Agra and Delhi, until in the seventeenth century they controlled nearly all of the subcontinent. They imposed structures of administration and ideas of governance that outlasted their rule, leaving a political legacy that succeeding rulers of the subcontinent could not ignore. Today the Prime Minister of India addresses the nation on Independence Day from the ramparts of the Red Fort in Delhi, the residence of the Mughal emperors.

### Who were the Mughals?

The Mughals were descendants of two great lineages of rulers. From their mother’s side they were descendants of Genghis Khan (died 1227), ruler of the Mongol tribes, China and Central Asia. From their father’s side they were the successors of Timur (died 1404), the ruler of Iran, Iraq and modern-day Turkey. However, the Mughals did not like to be called Mughal or Mongol. This was because Genghis Khan’s memory was

associated with the massacre of innumerable people. It was also linked with the Uzbeks, their Mongol competitors. On the other hand, the Mughals were proud of their Timurid ancestry, not least of all because their great ancestor had captured Delhi in 1398.

### Mughal Military Campaigns

Babur, the first Mughal emperor (1526-1530), succeeded to the throne of Ferghana in 1494 when he was only 12 years old. He was forced to leave his ancestral throne due to the invasion of another Mongol group, the Uzbeks. After years of wandering he seized Kabul in 1504. In 1526 he defeated the Sultan of Delhi, Ibrahim Lodi, at Panipat and captured Delhi and Agra.

*Cannons were an important addition in sixteenth-century warfare. Babur used them effectively in the first battle of Panipat.*

### Mughal Traditions of Succession

The Mughals did not believe in the rule of primogeniture, where the eldest son inherited his father's estate. Instead they followed the Mughal and Timurid custom of coparcenary inheritance, or a division of the inheritance amongst all the sons. Follow the highlighted passages in Table 1, and note the evidence for rebellions by Mughal princes. Which do you think is a fairer division of inheritance: primogeniture or coparcenary?

### Mughal marriages with the Rajputs

The mother of Jahangir was a Kachhwaha princess, daughter of the Rajput ruler of Amber (modern-day Jaipur). The mother of Shah Jahan was a Rathor princess, daughter of the Rajput ruler of Marwar (Jodhpur).

### Mughal Relations with Other Rulers

Take a look at Table 1 once again. You will notice that the Mughal rulers campaigned constantly against rulers who refused to accept their authority. But as the Mughals became powerful many other rulers also joined them voluntarily. The Rajputs are a good example of this. Many of them married their daughters into Mughal families and received high positions. But many resisted as well.

The Sisodiya Rajputs refused to accept Mughal authority for a long time. Once defeated, however, they were honourably treated by the Mughals, given their lands (watan) back as assignments (watan jagir). The careful balance between defeating but not humiliating their opponents enabled the Mughals to extend their influence over many kings and chieftains. But it was difficult to keep this balance all the time. Look at Table 1 again – note that Aurangzeb insulted Shivaji when he came to accept Mughal authority. What was the consequence of this insult?

### Mansabdars and Jagirdars

As the empire expanded to encompass different regions the Mughals recruited diverse bodies of people. From a small nucleus of Turkish nobles (Turanis) they expanded to include Iranians, Indian Muslims, Afghans, Rajputs, Marathas and other groups. Those who joined Mughal service were enrolled as mansabdars.



*Military campaigns under Akbar and Aurangzeb*

### Zat ranking

Nobles with a zat of 5,000 were ranked higher than those of 1,000. In Akbar's reign there were 29 mansabdars with a rank of 5,000 zat; by Aurangzeb's reign the number of mansabdars had increased to 79. Would this have meant more expenditure for the state?

The term mansabdar refers to an individual who holds a mansab, meaning a position or rank. It was a grading system used by the Mughals to fix (1) rank, (2) salary and (3) military responsibilities. Rank and salary were determined by a numerical value called zat. The higher the zat, the more prestigious was the noble's position in court and the larger his salary.

The mansabdar's military responsibilities required him to maintain a specified number of sawar or cavalymen. The mansabdar brought his cavalymen for review, got them registered, their horses branded and then received money to pay them as salary.

Mansabdars received their salaries as revenue assignments called jagirs which were somewhat like iqtas. But unlike muqtis, most mansabdars did not actually reside in or administer their jagirs. They only had rights to the revenue of their assignments which was collected for them by their servants while the mansabdars themselves served in some other part of the country.

In Akbar's reign these jagirs were carefully assessed so that their revenues were roughly equal to the salary of the mansabdar. By Aurangzeb's reign this was no longer the case and the actual revenue collected was often less than the granted sum. There was also a huge increase in the number of mansabdars, which meant a long wait before they received a jagir. These and other factors created a shortage in the number of jagirs. As a result, many jagirdars tried to extract as much revenue as possible while they had a jagir. Aurangzeb was unable to control these developments in the last years of his reign and the peasantry therefore suffered tremendously.

### Zabt and Zamindars

The main source of income available to Mughal rulers was tax on the produce of the peasantry. In most places, peasants paid taxes through the rural elites, that is, the headman or the local chieftain. The Mughals used one term – zamindars – to describe all intermediaries, whether they were local headmen of villages or powerful chieftains.



Akbar's revenue minister, Todar Mal, carried out a careful survey of crop yields, prices and areas cultivated for a 10-year period, 1570-1580. On the basis of this data, tax was fixed on each crop in cash. Each province was divided into revenue circles with its own schedule of revenue rates for individual crops. This revenue system was known as *zabt*. It was prevalent in those areas where Mughal administrators could survey the land and keep very careful accounts. This was not possible in provinces such as Gujarat and Bengal.

In some areas the zamindars exercised a great deal of power. The exploitation by Mughal administrators could drive them to rebellion. Sometimes zamindars and peasants of the same caste allied in rebelling against Mughal authority. These peasant revolts challenged the stability of the Mughal Empire from the end of the seventeenth century.

### Akbar Nama and Ain-i Akbari

Akbar ordered one of his close friends and courtiers, Abul Fazl, to write a history of his reign. Abul Fazl wrote a three-volume history of Akbar's reign, titled *Akbar Nama*. The first volume dealt with Akbar's ancestors and the second volume recorded the events of Akbar's reign. The third volume is the *Ain-i Akbari*. It deals with Akbar's administration, household, army, the revenues and the geography of his empire. It also provides rich details about the traditions and culture of the people living in India. The most interesting aspect about the *Ain-i Akbari* is its rich statistical details about things as diverse as crops, yields, prices, wages and revenues.

### A Closer Look: Akbar's Policies

The broad features of administration were laid down by Akbar and were elaborately discussed by Abul Fazl in his book, the *Akbar Nama*, in particular in its last volume, the *Ain-i Akbari*.

Abul Fazl explained that the empire was divided into provinces called *subas*, governed by a *subadar* who carried out both political and military functions. Each province also had a financial officer or *diwan*. For the maintenance of peace and order in his province, the *subadar* was supported by other officers such as the military paymaster (*bakhshi*), the minister in charge of religious and charitable patronage (*sadr*), military commanders (*faujdar*s) and the town police commander (*kotwal*).

### Nur Jahan's influence in Jahangir's court

Mehrunnisa married the Emperor Jahangir in 1611 and received the title Nur Jahan. She remained extremely loyal and supportive to the monarch. As a mark of honour, Jahangir struck silver coins bearing his own titles on one side and on the other the inscription "struck in the name of the Queen Begum, Nur Jahan". The adjoining document is an order (*farman*) of Nur Jahan. The square seal states, "Command of her most Sublime and Elevated Majesty Nur Jahan Padshah Begum". The round seal states, "by the sun of Shah Jahangir she became as brilliant as the moon; may Nur Jahan Padshah be the lady of the age".

Akbar's nobles commanded large armies and had access to large amounts of revenue. While they were loyal the empire functioned efficiently but by the end of the seventeenth century many nobles had built independent networks of their own. Their loyalties to the empire were weakened by their own self-interest.

**Dogma:** *A statement or an interpretation declared as authoritative with the expectation that it would be followed without question.*

**Bigot:** *An individual who is intolerant of another person's religious beliefs or culture.*

While Akbar was at Fatehpur Sikri during the 1570s he started discussions on religion with the *ulama*, Brahmanas, Jesuit priests who were Roman Catholics, and Zoroastrians. These discussions took place in the *ibadat khana*. He was interested in the religion and social customs of different people. Akbar's interaction with people of different faiths made him realise that religious scholars who emphasised ritual and **dogma** were often **bigots**. Their teachings created divisions and disharmony amongst his subjects. This eventually led Akbar to the idea of **sulh-i kul** or "universal peace". This idea of tolerance did not discriminate between people of different religions in his realm. Instead it focused on a system of ethics – honesty, justice, peace – that was universally applicable. Abul Fazl helped Akbar in framing a vision of governance around this idea of *sulh-i kul*. This principle of governance was followed by Jahangir and Shah Jahan as well.

### The Mughal Empire in the Seventeenth Century and After

The administrative and military efficiency of the Mughal Empire led to great economic and commercial prosperity. International travellers described it as the fabled land of wealth. But these same visitors were also appalled at the state of poverty that existed side by side with the greatest opulence. The inequalities were glaring. Documents from the twentieth year of Shah Jahan's reign inform us that the highest-ranking mansabdars were only 445 in number out of a total of 8,000. This small number – a mere 5.6 per cent of the total number of mansabdars – received 61.5 per cent of the total estimated revenue of the empire as salaries for themselves and their troopers.

The Mughal emperors and their mansabdars spent a great deal of their income on salaries and goods. This expenditure benefited the artisans and peasantry who supplied them with goods and produce. But the scale of revenue collection left very little for investment in the hands of the primary producers – the peasant and the artisan. The poorest amongst them lived from hand to mouth and they could hardly consider investing in additional resources – tools and supplies – to increase productivity. The wealthier peasantry and artisanal groups, the merchants and bankers profited in this economic world.

The enormous wealth and resources commanded by the Mughal elite made them an extremely powerful group of people in the late seventeenth century. As the authority of the Mughal emperor slowly declined, his servants emerged as powerful centres of power in the regions. They constituted new dynasties and held command of provinces like Hyderabad and Awadh. Although they continued to recognise the Mughal emperor in Delhi as their master, by the eighteenth century the provinces of the empire had consolidated their independent political identities.

### Kings and Queens

There were several great monarchs – all near-contemporaries – in different parts of the world in the sixteenth century.

These included the ruler of Ottoman Turkey, Sultan Suleyman 1520-1566. During his rule the Ottoman state expanded into Europe, seizing Hungary and besieging Austria. His armies also seized Baghdad and Iraq. Much of north Africa, all the way into Morocco, acknowledged Ottoman authority. Suleyman also reconstructed the Ottoman navy. Its domination over the eastern Mediterranean brought the navy into competition with Spain. In the Arabian Sea it challenged

the Portuguese. The monarch was given the title of “al-Qanuni” (the “lawgiver”) because of the large number of regulations (qanun) passed during his reign. These were aimed to standardise administrative procedures throughout the expanding domains of the empire and specifically to protect the peasantry from forced labour and extraordinary taxes. Later, in the seventeenth century, when public order declined in the Ottoman domains, the reign of Suleyman Qanuni was remembered as a period of ideal governance.

Find out more about Akbar’s other contemporaries – the ruler of England, Queen Elizabeth I (1558-1603); the Safavid ruler of Iran, Shah Abbas (1588-1629); and the more controversial Russian ruler, Czar Ivan IV Vasilyevich, also called “Ivan the Terrible” (1530-1584).

**Important Terms:** **Mansab:** A rank or position **Jagir:** Mansabdar received their salaries as revenue assignments **Zat:** Rank and salary determined by a numerical value **Sawar:** Cavalryman **Sulh-i-Kul:** Universal peace an initiative by Akbar **Primogeniture:** A system in which the eldest son inherited his father’s estate **Coparcenary:** Division of inheritance amongst all the sons **Zabt:** The system of revenue in which a revenue circle have its own schedule of revenue rates for individual crops **Zamindar:** Intermediaries who collect the revenue from peasants and submit it to state **Important Dates:** **1237:** Genghis Khan died **1404:** Timur died **1526-1530:** Reign of Babur. He captured Delhi in 1526 by defeating Ibrahim Lodi and laid the foundation of Mughal Empire. **1539:** Sher Shah defeated Humayun at Chausa **1540:** Sher Shah again defeated Humayun, this time at Kanauj. **1555:** Humayun recaptured Delhi. **1556:** Akbar became the Mughal Emperor at the age of 13. **1568:** Akbar seized Sisodia capital of Chittor (Haldi Ghati Battle). **1569:** Akbar seized Ranthambhor. **1605-1627:** Jahangir ruled over Delhi as the Mughal emperor. **1627-1658:** ShahJahan reigned over Delhi **1632:** Ahmadnagar was annexed by Shahjahan. **1658-1707:** Aurangzeb reigned over Delhi. **1685:** Aurangzeb annexed Bijapur. **1687:** Aurangzeb annexed Golconda. **1698:** Aurangzeb campaigned in the Deccan against the Marathas. **1707:** Aurangzeb died.

## Chapter 5 Rulers And Buildings

### Qutb Minar

*The Qutb Minar is five storeys high. The first floor was constructed by Qutbuddin Aybak in 1199 and the rest by Iltutmish around 1229. Over the years it was damaged by lightning and earthquakes and repaired by Alauddin Khalji, Muhammad Tughluq, Firuz Shah Tughluq and Ibrahim Lodi.*

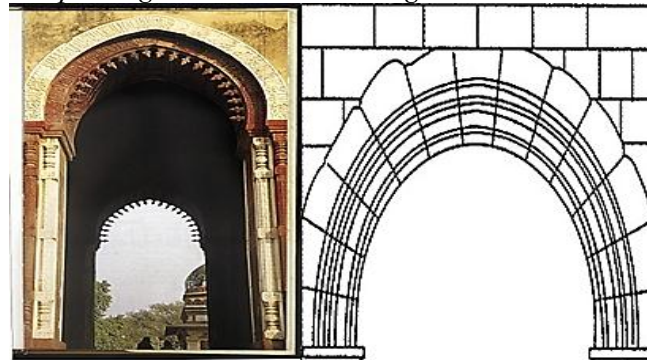
Between the eighth and the eighteenth centuries kings and their officers built two kinds of structures: the first were forts, palaces, garden residences and tombs – safe, protected and grandiose places of rest in this world and the next; the second were structures meant for public activity including temples, mosques, tanks, wells, caravanserais and bazaars. Kings were expected to care for their subjects, and by making structures for their use and comfort, rulers hoped to win their praise. Construction activity was also carried out by others, including merchants. They built temples, mosques and wells. However, domestic architecture – large mansions (havelis) of merchants – has survived only from the eighteenth century.

### Engineering Skills and Construction



**2a:** Screen in the Qutub al-Islam mosque, Delhi (late twelfth century). **2b:** Corbelled technique used in the construction of the screen.

Compare Figures 2a and 2b with Figures 5a and 5b.



**5a:** True arch; detail from the Alai Darwaza (early fourteenth century). Qutub al-Islam mosque, Delhi. **5bA** “true” arch. The “keystone” at the centre of the arch transferred the weight of the superstructure to the base of the arch.

Monuments provide an insight into the technologies used for construction. Take something like a roof for example. We can make this by placing wooden beams or a slab of stone across four walls. But the task becomes difficult if we want to make a large room with an elaborate **superstructure**. This requires more sophisticated skills.

Between the seventh and tenth centuries architects started adding more rooms, doors and windows to buildings. Roofs, doors and windows were still made by placing a horizontal beam across two vertical columns, a style of architecture called “trabeate” or “corbelled”. Between the eighth and thirteenth centuries the trabeate style was used in the construction of temples, mosques, tombs and in buildings attached to large stepped-wells (baolis).

Two technological and stylistic developments are noticeable from the twelfth century. (1) The weight of the superstructure above the doors and windows was sometimes carried by arches. This architectural form was called “arcuate”. (2) Limestone cement was increasingly used in construction. This was very high-quality cement, which, when mixed with stone chips hardened into concrete. This made construction of large structures easier and faster.

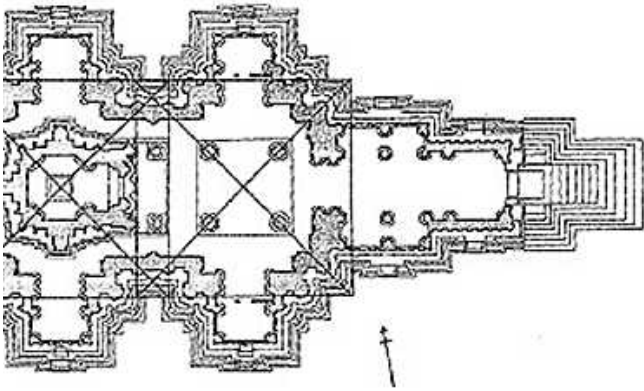
### Temple Construction in the Early Eleventh Century

The Kandariya Mahadeva temple dedicated to Shiva was constructed in 999 by the king Dhangadeva of the Chandela dynasty. b is the plan of the temple. An ornamented gateway led to an entrance, and the main hall (mahamandapa) where dances were performed. The image of the chief deity was kept in the main shrine



(garbhagriha). This was the place for ritual worship where only the king, his immediate family and priests gathered. The Khajuraho complex contained royal temples where commoners were not allowed entry. The temples were decorated with elaborately carved sculptures.

*? What differences do you notice between the shikharas of the two temples? Can you make out that the shikhara of the Rajarajeshvara temple is twice as high as that of the Kandariya Mahadeva?*



*The Rajarajeshvara temple at Thanjavur had the tallest shikhara amongst temples of its time. Constructing it was not easy because there were no cranes in those days and the 90 tonne stone for the top of the shikhara was too heavy to lift manually. So the architects built an inclined path to the top of the temple, placed the boulder on rollers and rolled it all the way to the top. The path started more than 4 km away so that it would not be too steep. This was dismantled after the temple was constructed. But the residents of the area remembered the experience of the construction of the temple for a long time. Even now a village near the temple is called Charupallam, the “Village of the Incline”.*

### Building Temples, Mosques and Tanks

Temples and mosques were beautifully constructed because they were places of worship. They were also meant to demonstrate the power, wealth and devotion of the patron. Take the example of the Rajarajeshvara temple. An inscription mentions that it was built by King Rajarajadeva for the worship of his god, Rajarajeshvaram. Notice how the names of the ruler and the god are very similar. The king took the god's name because it was auspicious and he wanted to appear like a god. Through the rituals of worship in the temple one god (Rajarajadeva) honoured another (Rajarajeshvaram).

### A royal architect

The Mughal emperor Shah Jahan's chronicler declared that the ruler was the “architect of the workshop of empire and religion”. The largest temples were all constructed by kings. The other, lesser deities in the temple were gods and goddesses of the allies and

subordinates of the ruler. The temple was a miniature model of the world ruled by the king and his allies. As they worshipped their deities together in the royal temples, it seemed as if they brought the just rule of the gods on earth.

Muslim Sultans and Padshahs did not claim to be incarnations of god but Persian court chronicles described the Sultan as the “Shadow of God”. An inscription in the Quwwat al-Islam mosque explained that God chose Alauddin as a king because he had the qualities of Moses and Solomon, the great lawgivers of the past. The greatest lawgiver and architect was God Himself. He created the world out of chaos and introduced order and symmetry.

As each new dynasty came to power, kings wanted to emphasise their moral right to be rulers. Constructing places of worship provided rulers with the chance to proclaim their close relationship with God, especially important in an age of rapid political change. Rulers also offered patronage to the learned and pious, and tried to transform their capitals and cities into great cultural centres that brought fame to their rule and their realm.

### Importance of water

The Persian terms abad, populated, prosperous, and abadi, flourishing, are both derived from the word ab, meaning water.

Making precious water available by constructing tanks and reservoirs was highly praised. Sultan Iltutmish won universal respect for constructing a large reservoir just outside Dehli-i-Kuhna. It was called the Hauz-i-Sultani or the “King's Reservoir”.

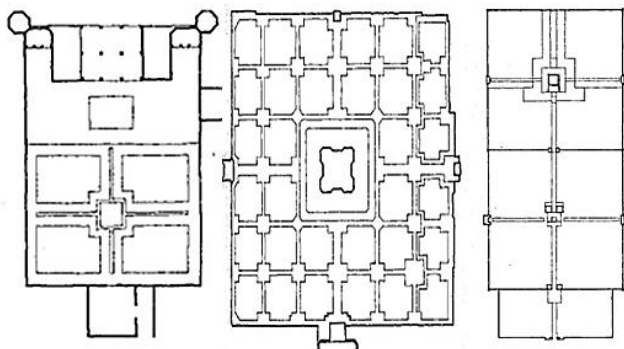
Rulers often constructed tanks and reservoirs – big and small – for use by ordinary people. Sometimes these tanks and reservoirs were part of a temple, mosque (note the small tank in the jami masjid in ) or a gurdwara (a place of worship and congregation for Sikhs, ).

### Why were Temples Destroyed?

Because kings built temples to demonstrate their devotion to God and their power and wealth, it is not surprising that when they attacked one another's kingdoms they often targeted these buildings. In the early ninth century when the Pandyan king Shrivallabha invaded Sri Lanka and defeated the king, Sena I looted Monasteries. The blow to the pride of the Sinhalese ruler had to be avenged and the next Sinhalese ruler, Sena II, ordered his general to invade Madurai, the capital of the Pandyas. Similarly Sultan Mahmud of Ghazni was a contemporary of Rajendra I. During his campaigns in the subcontinent he also attacked the temples of defeated kings and looted their wealth and idols. Sultan Mahmud was not a very important ruler at that time. But by destroying temples – especially the one at Somnath – he tried to win credit as a great hero of Islam. In the political culture of the Middle Ages most rulers displayed their political might and military success by attacking and looting the places of worship of defeated rulers.

### Mughal chahar baghs





(a) The chahar bagh in Humayun's tomb, Delhi, 1562-1571.

(b) Terraced chahar bagh at Shalimar gardens, Kashmir, 1620 and 1634.

(c) The chahar bagh adapted as a river-front garden at Lal Mahal Bari, 1637.

### Gardens, Tombs and Forts

Under the Mughals, architecture became more complex. Babur, Humayun, Akbar, Jahangir, and especially Shah Jahan were personally interested in literature, art and architecture. In his autobiography, Babur described his interest in planning and laying out formal gardens, placed within rectangular walled enclosures and divided into four quarters by artificial channels.

These gardens were called chahar bagh, four gardens, because of their symmetrical division into quarters. Beginning with Akbar, some of the most beautiful chahar baghs were constructed by Jahangir and Shah Jahan in Kashmir, Agra and Delhi.

There were several important architectural innovations during Akbar's reign. For inspiration, Akbar's architects turned to the tombs of his Central Asian ancestor, Timur. The central towering dome and the tall gateway (pishtaq) became important aspects of Mughal architecture, first visible in Humayun's tomb. The tomb was placed in the centre of a huge formal chahar bagh and built in the tradition known as "eight paradises" or hasht bihisht – a central hall surrounded by eight rooms. The building was constructed with red sandstone, edged with white marble.

It was during Shah Jahan's reign that the different elements of Mughal architecture were fused together in a grand harmonious synthesis. His reign witnessed a huge amount of construction activity especially in Agra and Delhi. The ceremonial halls of public and private audience (diwan-i khas o am) were carefully planned. Placed within a large courtyard, these courts were also described as chihil sutun or forty-pillared halls. Shah Jahan's audience halls were specially constructed to resemble a mosque. The pedestal on which his throne was placed was frequently described as the qibla, the direction faced by Muslims at prayer, since everybody faced that direction when court was in session. The idea of the king as a representative of God on earth was suggested by these architectural features.

The connection between royal justice and the imperial court was emphasised by Shah Jahan in his newly constructed court in the Red Fort at Delhi. Behind the emperor's throne were a series of **pietra dura** inlays that depicted the legendary Greek god Orpheus playing the lute. It was believed that Orpheus's music could calm ferocious beasts until they coexisted together peacefully. The construction of Shah Jahan's audience hall aimed to communicate that the king's justice would treat the high and the low as equals creating a world

where all could live together in harmony.

### Pietra dura

Coloured, hard stones placed in depressions carved into marble or sandstone creating beautiful, ornate patterns. In the early years of his reign, Shah Jahan's capital was at Agra, a city where the nobility had constructed their homes on the banks of the river Yamuna. These were set in the midst of formal gardens constructed in the chahar bagh format. The chahar bagh garden also had a variation that historians describe as the "river-front garden". In this the dwelling was not located in the middle of the chahar bagh but at its edge, close to the bank of the river.

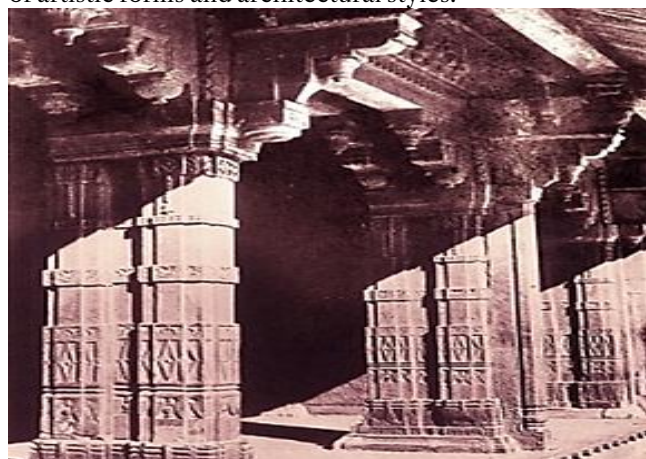
Shah Jahan adapted the river-front garden in the layout of the Taj Mahal, the grandest architectural accomplishment of his reign. Here the white marble mausoleum was placed on a terrace by the edge of the river and the garden was to its south. Shah Jahan developed this architectural form as a means to control the access that nobles had to the river.

In the new city of Shahjahanabad that he constructed in Delhi, the imperial palace commanded the river-front. Only specially favoured nobles – like his eldest son Dara Shukoh – were given access to the river. All others had to construct their homes in the city away from the River Yamuna.

### Region and Empire

As construction activity increased between the eighth and eighteenth centuries there was also a considerable sharing of ideas across regions: the traditions of one region were adopted by another. In Vijayanagara, for example, the elephant stables of the rulers were strongly influenced by the style of architecture found in the adjoining Sultanates of Bijapur and Golconda. In Vrindavan, near Mathura, temples were constructed in architectural styles that were very similar to the Mughal palaces in Fatehpur Sikri.

The creation of large empires that brought different regions under their rule helped in this cross-fertilisation of artistic forms and architectural styles.



Decorated pillars and struts holding the extension of the roof in Jodh Bai palace in Fatehpur Sikri. These follow architectural traditions of the Gujarat region.

Mughal rulers were particularly skilled in adapting regional architectural styles in the construction of their own buildings. In Bengal, for example, the local rulers had developed a roof that was designed to resemble a thatched hut. The Mughals liked this "Bangla dome" so much that they used it in their architecture. The impact of other regions was also evident. In Akbar's capital at Fatehpur Sikri many of the buildings show the influence of the architectural styles of Gujarat and Malwa.

Even though the authority of the Mughal rulers waned in the eighteenth century, the architectural styles developed under their patronage were constantly used and adapted by other rulers whenever they tried to establish their own kingdoms.

### Churches that touched the skies

From the twelfth century onwards, attempts began in France to build churches that were taller and lighter than earlier buildings. This architectural style, known as Gothic, was distinguished by high pointed arches, the use of stained glass, often painted with scenes drawn from the Bible, and flying buttresses. Tall spires and bell towers which were visible from a distance were added to the church.

One of the best-known examples of this architectural style is the church of Notre Dame in Paris, which was constructed through several decades in the twelfth and thirteenth centuries.

Look at the illustration and try and identify the bell towers.

**Important Terms:** **Hauz-i-sultani:** Kings reservoir **Diwan-i-am:** The ceremonial halls of public **Diwan-i-khas:** The ceremonial hall of private audience **Baolis:** Large stepped-wells are called baolis **Mahamandapa:** Mahamandapa is an ornamented main hall of the temple **Garbhagriha:** Garbhagriha is the main shrine of the temple **Charupallam:** Village near the temple **Padshahs:** Emperors **Gurdwara:** A place of worship and congregation of the Sikhs is known as Gurdwara

**Important Dates:** **Between eighth and eighteenth century:** Two kinds of structures were built by kings—the first were forts, palaces, garden, residences and tombs and the second were structures such as temples, mosques, wells, tanks, caravan, serais and bazaars. **Between seventh and tenth century:** Architects started to add rooms, doors and windows to buildings.

## Chapter 6 Towns, Traders And Craftspersons

What would a traveller visiting a medieval town expect to find? This would depend on what kind of a town it was – a temple town, an administrative centre, a commercial town or a port town to name just some possibilities. In fact, many towns combined several functions – they were administrative centres, temple towns, as well as centres of commercial activities and craft production.

### Administrative Centres

Thanjavur was the capital of the Cholas. The perennial river Kaveri flows near this beautiful town. One hears the bells of the Rajarajeshvara temple built by King Rajaraja Chola. The townspeople are all praise for its architect Kunjaramallan Rajaraja Perunthachchan who has proudly carved his name on the temple wall. Inside is a massive Shiva linga.

Besides the temple, there are palaces with mandapas or pavilions. Kings hold court in these mandapas, issuing orders to their subordinates. There are also barracks for the army.

The town is bustling with markets selling grain, spices, cloth and jewellery. Water supply for the town comes from wells and tanks. The Saliya weavers of Thanjavur and the nearby town of Uraiyur are busy producing cloth for flags to be used in the temple festival, fine cottons for the king and nobility and coarse cotton for the masses. Some distance away at Svamimalai, the sthapatis or sculptors are making exquisite bronze idols and tall, ornamental bell metal lamps.

### Temple Towns and Pilgrimage Centres

Thanjavur is also an example of a temple town. Temple towns represent a very important pattern of urbanisation, the process by which cities develop. Temples were often central to the economy and society. Rulers built temples to demonstrate their devotion to various deities. They also endowed temples with grants of land and money to carry out elaborate rituals, feed pilgrims and priests and celebrate festivals. Pilgrims who flocked to the temples also made donations.

### Bronze, bell metal and the “lost wax” technique

Bronze is an alloy containing copper and tin. Bell metal contains a greater proportion of tin than other kinds of bronze. This produces a bell-like sound.

*Chola bronze statues were made using the “lost wax” technique.* First, an image was made of wax. This was covered with clay and allowed to dry. Next it was heated, and a tiny hole was made in the clay cover. The molten wax was drained out through this hole. Then molten metal was poured into the clay mould through the hole. Once the metal cooled and solidified, the clay cover was carefully removed, and the image was cleaned and polished.

Temple authorities used their wealth to finance trade and banking. Gradually a large number of priests, workers, artisans, traders, etc. settled near the temple to cater to its needs and those of the pilgrims. Thus grew temple towns. Towns emerged around temples such as those of Bhillasvamin (Bhilsa or Vidisha in Madhya Pradesh), and Somnath in Gujarat. Other important temple towns included Kanchipuram and Madurai in Tamil Nadu, and Tirupati in Andhra Pradesh.

Pilgrimage centres also slowly developed into townships. Vrindavan (Uttar Pradesh) and Tiruvannamalai (Tamil Nadu) are examples of two such towns. Ajmer (Rajasthan) was the capital of the Chauhan kings in the twelfth century and later became the suba headquarters under the Mughals. It provides an excellent example of religious coexistence. Khwaja Muinuddin Chishti, the celebrated Sufi saint who settled there in the twelfth century, attracted devotees from all creeds. Near Ajmer is a lake, Pushkar, which has attracted pilgrims from ancient times.

### A Network of Small Towns

From the eighth century onwards the subcontinent was dotted with several small towns. These probably emerged from large villages. They usually had a mandapika (or mandi of later times) to which nearby villagers brought their produce to sell. They also had market streets called hatta (haat of later times) lined with shops. Besides, there were streets for different kinds of artisans such as potters, oil pressers, sugar makers, toddy makers, smiths, stonemasons, etc. While some traders lived in the town, others travelled from town to town. Many came from far and near to these towns to buy local articles and sell products of distant places like horses, salt, camphor, saffron, betel nut and spices like pepper.

Usually a samanta or, in later times, a zamindar built a fortified palace in or near these towns. They levied taxes on traders, artisans and articles of trade and sometimes “donated” the “right” to collect these taxes to local temples, which had been built by themselves or by rich merchants. These “rights” were recorded in inscriptions that have survived to this day.

### Taxes on markets

The following is a summary from a tenth-century inscription from Rajasthan, which lists the dues that

were to be collected by temple authorities: *There were taxes in kind on: Sugar and jaggery, dyes, thread, and cotton, On coconuts, salt, areca nuts, butter, sesame oil, On cloth.*

Besides, there were taxes on traders, on those who sold metal goods, on distillers, on oil, on cattle fodder, and on loads of grain. Some of these taxes were collected in kind, while others were collected in cash.

### Traders Big and Small

There were many kinds of traders. These included the Banjaras. Several traders, especially horse traders, formed associations, with headmen who negotiated on their behalf with warriors who bought horses.

Since traders had to pass through many kingdoms and forests, they usually travelled in caravans and formed guilds to protect their interests. There were several such guilds in south India from the eighth century onwards – the most famous being the Manigramam and Nanadesi. These guilds traded extensively both within the peninsula and with Southeast Asia and China.

There were also communities like the Chettiers and the Marwari Oswal who went on to become the principal trading groups of the country. Gujarati traders, including the communities of Hindu Baniyas and Muslim Bohras, traded extensively with the ports of the Red Sea, Persian Gulf, East Africa, Southeast Asia and China. They sold textiles and spices in these ports and, in exchange, brought gold and ivory from Africa; and spices, tin, Chinese blue pottery and silver from Southeast Asia and China.

The towns on the west coast were home to Arab, Persian, Chinese, Jewish and Syrian Christian traders. Indian spices and cloth sold in the Red Sea ports were purchased by Italian traders and eventually reached European markets, fetching very high profits. Spices grown in tropical climates (pepper, cinnamon, nutmeg, dried ginger, etc.) became an important part of European cooking, and cotton cloth was very attractive. This eventually drew European traders to India. We will shortly read about how this changed the face of trading and towns.

### Kabul

With its rugged, mountainous landscape, Kabul (in present-day Afghanistan) became politically and commercially important from the sixteenth century onwards. Kabul and Qandahar were linked to the celebrated Silk Route. Besides, trade in horses was primarily carried on through this route. In the seventeenth century Jean Baptiste Tavernier, a diamond merchant, estimated that the horse trade at Kabul amounted to Rs 30,000 annually, which was a huge sum in those days. Camels carried dried fruits, dates, carpets, silks and even fresh fruits from Kabul to the subcontinent and elsewhere. Slaves were also brought here for sale.

### Crafts in Towns

The craftspersons of Bidar were so famed for their inlay work in copper and silver that it came to be called Bidri. The Panchalas or Vishwakarma community, consisting of goldsmiths, bronzesmiths, blacksmiths, masons and carpenters, were essential to the building of temples. They also played an important role in the construction of palaces, big buildings, tanks and reservoirs. Similarly, weavers such as the Saliyar or Kaikkolars emerged as prosperous communities, making donations to temples. Some aspects of cloth making like cotton cleaning, spinning and dyeing became specialised and independent crafts.

### The changing fortunes of towns

Some towns like Ahmedabad (Gujarat) went on to become major commercial cities but others like Thanjavur shrank in size and importance over the centuries. Murshidabad (West Bengal) on the banks of the Bhagirathi, which rose to prominence as a centre for silks and became the capital of Bengal in 1704, declined in the course of the century as the weavers faced competition from cheap mill-made cloth from England.

### A Closer Look: Hampi, Masulipatnam and Surat The Architectural Splendour of Hampi

Hampi is located in the Krishna-Tungabhadra basin, which formed the nucleus of the Vijayanagara Empire, founded in 1336. The magnificent ruins at Hampi reveal a well-fortified city. No mortar or cementing agent was used in the construction of these walls and the technique followed was to wedge them together by interlocking.

#### A fortified city

This is how a Portuguese traveller, Domingo Paes, described Hampi in the sixteenth century:

*... at the entrance of the gate where those pass who come from Goa, this king has made within it a very strong city fortified with walls and towers; these walls are not like those of other cities, but are made of very strong masonry such as would be found in few other parts, and inside very beautiful rows of buildings made after their manner with flat roofs. Why do you think the city was fortified?*

The architecture of Hampi was distinctive. The buildings in the royal complex had splendid arches, domes and pillared halls with niches for holding sculptures. They also had well-planned orchards and pleasure gardens with sculptural motifs such as the lotus and corbels. In its heyday in the fifteenth-sixteenth centuries, Hampi bustled with commercial and cultural activities. Moors (a name used collectively for Muslim merchants), Chettis and agents of European traders such as the Portuguese, thronged the markets of Hampi. Temples were the hub of cultural activities and devadasis (temple dancers) performed before the deity, royalty and masses in the many-pillared halls in the Virupaksha (a form of Shiva) temple. The Mahanavami festival, known today as Navaratri in the south, was one of the most important festivals celebrated at Hampi. Archaeologists have found the Mahanavami platform where the king received guests and accepted tribute from subordinate chiefs. From here he also watched dance and music performances as well as wrestling bouts.

Hampi fell into ruin following the defeat of Vijayanagara in 1565 by the Deccani Sultans – the rulers of Golconda, Bijapur, Ahmadnagar, Berar and Bidar.

### A Gateway to the West: Surat

Surat in Gujarat was the **emporium** of western trade during the Mughal period along with Cambay (present-day Khambhat) and somewhat later, Ahmedabad. Surat was the gateway for trade with West Asia via the Gulf of Ormuz. Surat has also been called the gate to Mecca because many pilgrim ships set sail from here.

#### Emporium

A place where goods from diverse production centres are bought and sold.

The city was cosmopolitan and people of all castes and creeds lived there. In the seventeenth century the Portuguese, Dutch and English had their factories and warehouses at Surat. According to the English chronicler Ovington who wrote an account of the port



in 1689, on average a hundred ships of different countries could be found anchored at the port at any given time.

There were also several retail and wholesale shops selling cotton textiles. The textiles of Surat were famous for their gold lace borders (zari) and had a market in West Asia, Africa and Europe. The state built numerous rest-houses to take care of the needs of people from all over the world who came to the city. There were magnificent buildings and innumerable pleasure parks. The Kathiawad seths or mahajans (moneychangers) had huge banking houses at Surat. It is noteworthy that the Surat **hundis** were honoured in the far-off markets of Cairo in Egypt, Basra in Iraq and Antwerp in Belgium.

**Hundi** is a note recording a deposit made by a person. The amount deposited can be claimed in another place by presenting the record of the deposit.

However, Surat began to decline towards the end of the seventeenth century. This was because of many factors: the loss of markets and productivity because of the decline of the Mughal Empire, control of the sea routes by the Portuguese and competition from Bombay (present-day Mumbai) where the English East India Company shifted its headquarters in 1668. Today, Surat is a bustling commercial centre.

### Fishing in Troubled Waters: Masulipatnam

The town of Masulipatnam or Machlipatnam (literally, fish port town) lay on the delta of the Krishna river. In the seventeenth century it was a centre of intense activity.

Both the Dutch and English East India Companies attempted to control Masulipatnam as it became the most important port on the Andhra coast. The fort at Masulipatnam was built by the Dutch.

### A poor fisher town

This is a description of Masulipatnam by William Methwold, a **Factor** of the English East India Company, in 1620:

*This is the chiefport of Golconda, where the Right Worshipfull East India Company have their Agent. It is a small town but populous, unwalld, ill built and worse situated; within all the springs are brackish. It was first a poor fisher town ... afterwards, the convenience of the road (a place where ships can anchor) made it a residence for merchants and so continues since our and the Dutch nation frequented this coast.*

*Why did the English and the Dutch decide to establish settlements in Masulipatnam?*

### Factor

The Qutb Shahi rulers of Golconda imposed royal monopolies on the sale of textiles, spices and other items to prevent the trade passing completely into the hands of the various East India Companies. Fierce competition among various trading groups – the Golconda nobles, Persian merchants, Telugu Komati Chettis, and European traders – made the city populous and prosperous. As the Mughals began to extend their power to Golconda their representative, the governor Mir Jumla who was also a merchant, began to play off the Dutch and the English against each other. In 1686-1687 Mughal Emperor Aurangzeb annexed Golconda. This caused the European Companies to look for alternatives. It was a part of the new policy of the English East India Company that it was not enough if a port had connections with the production centres of the hinterland. The new Company trade centres, it was felt, should combine political, administrative and

commercial roles. As the Company traders moved to Bombay, Calcutta (present-day Kolkata) and Madras (present-day Chennai), Masulipatnam lost both its merchants and prosperity and declined in the course of the eighteenth century, being today nothing more than a dilapidated little town.

### New Towns and Traders

In the sixteenth and seventeenth centuries, European countries were searching for spices and textiles, which had become popular both in Europe and West Asia. The English, Dutch and French formed East India Companies in order to expand their commercial activities in the east. Initially great Indian traders like Mulla Abdul Ghafur and Virji Vora who owned a large number of ships competed with them. However, the European Companies used their naval power to gain control of the sea trade and forced Indian traders to work as their agents. Ultimately, the English emerged as the most successful commercial and political power in the subcontinent.

The spurt in demand for goods like textiles led to a great expansion of the crafts of spinning, weaving, bleaching, dyeing, etc. with more and more people taking them up. Indian textile designs became increasingly refined.

However, this period also saw the decline of the independence of craftspersons. They now began to work on a system of advances which meant that they had to weave cloth which was already promised to European agents. Weavers no longer had the liberty of selling their own cloth or weaving their own patterns. They had to reproduce the designs supplied to them by the Company agents.

The eighteenth century saw the rise of Bombay, Calcutta and Madras, which are nodal cities today. Crafts and commerce underwent major changes as merchants and artisans (such as weavers) were moved into the Black Towns established by the European companies within these new cities. The “blacks” or native traders and craftspersons were confined here while the “white” rulers occupied the superior residencies of Fort St. George in Madras or Fort St. William in Calcutta. The story of crafts and commerce in the eighteenth century will be taken up next year.

**Important Terms: Temple towns:** A town developed around a temple **Vishwakarma:** Community of goldsmiths, bronze smiths, black smith, masons and carpenters

**Emporium:** A place where goods from diverse production centres are brought and sold **Black town:** Town established by European companies where native traders and craftspersons lived **Bidri** The craftspersons of Bidar were very famous. Their inlay work in copper and silver came to be known as Bidri. **zari** The textiles of Surat were famous for their gold lace borders known as zari. “lost wax” technique.

**Important Dates: 1336:** Vijayanagara empire founded **1565:** Vijayanagara defeated **1704:** Murshidabad was declared as capital of Bengal **17th century:** Masulipatnam as centre of activity **18th century:** Rise of Bombay, Calcutta, Madras

## Chapter 7 Tribes, Nomads And Settled Communities

You saw in Chapters 2, 3 and 4 how kingdoms rose and fell. Even as this was happening, new arts, crafts and production activities flourished in towns and villages. Over the centuries important political, social and economic developments had taken place. But social change was not the same everywhere, because different kinds of societies evolved differently. It is important to

understand how, and why, this happened.

In large parts of the subcontinent, society was already divided according to the rules of varna. These rules, as prescribed by the Brahmanas, were accepted by the rulers of large kingdoms. The difference between the high and low, and between the rich and poor, increased. Under the Delhi Sultans and the Mughals, this hierarchy between social classes grew further.

### Beyond Big Cities: Tribal Societies

There were, however, other kinds of societies as well. Many societies in the subcontinent did not follow the social rules and rituals prescribed by the Brahmanas. Nor were they divided into numerous unequal classes. Such societies are often called tribes.

Members of each tribe were united by kinship bonds. Many tribes obtained their livelihood from agriculture. Others were hunter-gatherers or herders. Most often they combined these activities to make full use of the natural resources of the area in which they lived. Some tribes were nomadic and moved from one place to another. A tribal group controlled land and pastures jointly, and divided these amongst households according to its own rules.

Many large tribes thrived in different parts of the subcontinent. They usually lived in forests, hills, deserts and places difficult to reach. Sometimes they clashed with the more powerful caste-based societies. In various ways, the tribes retained their freedom and preserved their separate culture.

But the caste-based and tribal societies also depended on each other for their diverse needs. This relationship, of conflict and dependence, gradually caused both societies to change.

### Who were Tribal People?

Contemporary historians and travellers give very scanty information about tribes. A few exceptions apart, tribal people did not keep written records. But they preserved rich customs and oral traditions. These were passed down to each new generation. Present-day historians have started using such oral traditions to write tribal histories.

Tribal people were found in almost every region of the subcontinent. The area and influence of a tribe varied at different points of time. Some powerful tribes controlled large territories. In Punjab, the Khokhar tribe was very influential during the thirteenth and fourteenth centuries. Later, the Gakkhars became more important. Their chief, Kamal Khan Gakkhar, was made a noble (mansabdar) by Emperor Akbar. In Multan and Sind, the Langahs and Arghuns dominated extensive regions before they were subdued by the Mughals. The Balochis were another large and powerful tribe in the north-west. They were divided into many smaller **clans** under different chiefs. In the western Himalaya lived the shepherd tribe of Gaddis. The distant north-eastern part of the subcontinent too was entirely dominated by tribes – the Nagas, Ahoms and many others.

**Clan** A clan is a group of families or households claiming descent from a common ancestor. Tribal organisation is often based on kinship or clan loyalties.

In many areas of present-day Bihar and Jharkhand, Chero chiefdoms had emerged by the twelfth century. Raja Man Singh, Akbar's famous general, attacked and defeated the Cheros in 1591. A large amount of booty was taken from them, but they were not entirely subdued. Under Aurangzeb, Mughal forces captured many Chero fortresses and subjugated the tribe. The Mundas and Santals were among the other important

tribes that lived in this region and also in Orissa and Bengal.

The Maharashtra highlands and Karnataka were home to Kolis, Berads and numerous others. Kolis also lived in many areas of Gujarat. Further south there were large tribal populations of Koragas, Vetars, Maravars and many others.

The large tribe of Bhils was spread across western and central India. By the late sixteenth century, many of them had become settled agriculturists and some even zamindars. Many Bhil clans, nevertheless, remained hunter-gatherers. The Gonds were found in great numbers across the present-day states of Chhattisgarh, Madhya Pradesh, Maharashtra and Andhra Pradesh.

### How Nomads and Mobile People Lived

**Nomadic pastoralists** moved over long distances with their animals. They lived on milk and other pastoral products. They also exchanged wool, ghee, etc., with settled agriculturists for grain, cloth, utensils and other products. They bought and sold these goods as they moved from one place to another, transporting them on their animals.

The Banjaras were the most important trader-nomads. Their caravan was called *tanda*. Sultan Alaaddin Khalji used the Banjaras to transport grain to the city markets. Emperor Jahangir wrote in his memoirs that the Banjaras carried grain on their bullocks from different areas and sold it in towns. They transported food grain for the Mughal army during military campaigns. With a large army there could be 100,000 bullocks carrying grain.

### Nomads and itinerant groups

*Nomads are wandering people. Many of them are pastoralists who roam from one pasture to another with their flocks and herds. Similarly, itinerant groups, such as craftspersons, pedlars and entertainers travel from place to place practising their different occupations. Both nomads and itinerant groups often visit the same places every year.*

### The Banjaras

Banjaras are one of many pastoral tribes reared and sold animals, such as cattle and horses, to the prosperous people. Different castes of petty pedlars also travelled from village to village. They made and sold wares such as ropes, reeds, straw matting and coarse sacks. Sometimes mendicants acted as wandering merchants. There were castes of entertainers who performed in different towns and villages for their livelihood.

### Changing Society: New Castes and Hierarchies

As the economy and the needs of society grew, people with new skills were required. Smaller castes, or jatis, emerged within varnas. For example, new castes appeared amongst the Brahmanas. On the other hand, many tribes and social groups were taken into caste-based society and given the status of jatis. Specialised artisans – smiths, carpenters and masons – were also recognised as separate jatis by the Brahmanas. Jatis, rather than varna, became the basis for organising society.

### Deliberations on jati

A twelfth-century inscription from Uyyakondan Udaiyar, in Tiruchirapalli taluka (in present-day Tamil Nadu), describes the deliberations in a sabha of Brahmanas.

*They deliberated on the status of a group known as rathakaras (literally, chariot makers). They laid down their occupations, which were to include architecture, building coaches and chariots, erecting gateways for temples with images in them, preparing wooden*

*equipment used to perform sacrifices, building mandapas, making jewels for the king.*

Among the Kshatriyas, new Rajput clans became powerful by the eleventh and twelfth centuries. They belonged to different lineages, such as Hunas, Chandelas, Chalukyas and others. Some of these, too, had been tribes earlier. Many of these clans came to be regarded as Rajputs. They gradually replaced the older rulers, especially in agricultural areas. Here a developed society was emerging, and rulers used their wealth to create powerful states.

The rise of Rajput clans to the position of rulers set an example for the tribal people to follow. Gradually, with the support of the Brahmanas, many tribes became part of the caste system. But only the leading tribal families could join the ruling class. A large majority joined the lower jatis of caste society. On the other hand, many dominant tribes of Punjab, Sind and the North-West Frontier had adopted Islam quite early. They continued to reject the caste system. The unequal social order, prescribed by orthodox Hinduism, was not widely accepted in these areas.

The emergence of states is closely related to social change amongst tribal people. Two examples of this important part of our history are described below.

### A Closer Look

#### The Gonds

The Gonds lived in a vast forested region called Gondwana – or “country inhabited by Gonds”. They practised **shifting cultivation**. The large Gond tribe was further divided into many smaller clans. Each clan had its own raja or rai. About the time that the power of the Delhi Sultans was declining, a few large Gond kingdoms were beginning to dominate the smaller Gond chiefs. The Akbar Nama, a history of Akbar's reign, mentions the Gond kingdom of Garha Katanga that had 70,000 villages.

#### Shifting cultivation

*Trees and bushes in a forest area are first cut and burnt. The crop is sown in the ashes. When this land loses its fertility, another plot of land is cleared and planted in the same way.*

The administrative system of these kingdoms was becoming centralised. The kingdom was divided into garhs. Each garh was controlled by a particular Gond clan. This was further divided into units of 84 villages called chaurasi. The chaurasi was subdivided into barhots which were made up of 12 villages each. The emergence of large states changed the nature of Gond society. Their basically equal society gradually got divided into unequal social classes. Brahmanas received land grants from the Gond rajas and became more influential. The Gond chiefs now wished to be recognised as Rajputs. So, Aman Das, the Gond raja of Garha Katanga, assumed the title of Sangram Shah. His son, Dalpat, married princess Durgawati, the daughter of Salbahan, the Chandel Rajput raja of Mahoba. Dalpat, however, died early. Rani Durgawati was very capable, and started ruling on behalf of her five-year-old son, Bir Narain. Under her, the kingdom became even more extensive. In 1565, the Mughal forces under Asaf Khan attacked Garha Katanga. A strong resistance was put up by Rani Durgawati. She was defeated and preferred to die rather than surrender. Her son, too, died fighting soon after.

Garha Katanga was a rich state. It earned much wealth by trapping and exporting wild elephants to other kingdoms. When the Mughals defeated the Gonds, they captured a huge booty of precious coins and elephants.

They annexed part of the kingdom and granted the rest to Chandra Shah, an uncle of Bir Narain. Despite the fall of Garha Katanga, the Gond kingdoms survived for some time. However, they became much weaker and later struggled unsuccessfully against the stronger Bundelas and Marathas.

*Why the Mughals were interested in the land of the Gonds.*

#### The Ahoms

The Ahoms migrated to the Brahmaputra valley from present-day Myanmar in the thirteenth century. They created a new state by suppressing the older political system of the bhuiyans (landlords). During the sixteenth century, they annexed the kingdoms of the Chhutiyas (1523) and of Koch-Hajo (1581) and subjugated many other tribes. The Ahoms built a large state, and for this they used firearms as early as the 1530s. By the 1660s they could even make high-quality gunpowder and cannons.

However, the Ahoms faced many invasions from the south-west. In 1662, the Mughals under Mir Jumla attacked the Ahom kingdom. Despite their brave defence, the Ahoms were defeated. But direct Mughal control over the region could not last long.

The Ahom state depended upon forced labour. Those forced to work for the state were called paiks. A census of the population was taken. Each village had to send a number of paiks by rotation. People from heavily populated areas were shifted to less populated places. Ahom clans were thus broken up. By the first half of the seventeenth century the administration became quite centralised.

Almost all adult males served in the army during war. At other times, they were engaged in building dams, irrigation systems and other public works. The Ahoms also introduced new methods of rice cultivation.

Ahom society was divided into clans or khels. There were very few castes of artisans, so artisans in the Ahom areas came from the adjoining kingdoms. A khel often controlled several villages. The peasant was given land by his village community. Even the king could not take it away without the community's consent.

Originally, the Ahoms worshipped their own tribal gods. During the first half of the seventeenth century, however, the influence of Brahmanas increased.

Temples and Brahmanas were granted land by the king. In the reign of Sib Singh (1714-1744), Hinduism became the predominant religion. But the Ahom kings did not completely give up their traditional beliefs after adopting Hinduism.

Ahom society was very sophisticated. Poets and scholars were given land grants. Theatre was encouraged. Important works of Sanskrit were translated into the local language. Historical works, known as buranjis, were also written – first in the Ahom language and then in Assamese.

*Why do you think the Mughals tried to conquer the land of the Ahoms?*

#### Conclusion

Considerable social change took place in the subcontinent during the period we have been examining. Varna-based society and tribal people constantly interacted with each other. This interaction caused both kinds of societies to adapt and change. There were many different tribes and they took up diverse livelihoods. Over a period of time, many of them merged with caste-based society. Others, however, rejected both the caste system and orthodox Hinduism. Some tribes established extensive states with well-



organised systems of administration. They thus became politically powerful. This brought them into conflict with larger and more complex kingdoms and empires.

## ELSEWHERE

### The Mongols

Find Mongolia in your atlas. The best-known pastoral and hunter-gatherer tribe in history were the Mongols. They inhabited the grasslands (steppes) of Central Asia and the forested areas further north. By 1206 Genghis Khan had united the Mongol and Turkish tribes into a powerful military force. At the time of his death (1227) he was the ruler of extensive territories. His successors created a vast empire. At different points of time, it included parts of Russia, Eastern Europe and also China and much of West Asia. The Mongols had well-organised military and administrative systems. These were based on the support of different ethnic and religious groups.

**Important Terms:** **Varna:** The classification of society on the basis of occupation **Jati:** Caste system among the Varna

**Tanda:** Carvan **Garh:** In Ahoms the kingdom divided into smaller units was known as Garh. **Chaurasi:** A unit of 84 villages **Barhot:** A chaurasi divided in barhot, made up of 12 villages **Bhuiyans:** Landlords **Paik:** Forced labour for the state **Khel:** Ahom society divided into clans known as khel **Buranji:** Written historical work. **Census:** Counting of population.

**Important Dates:** **1523:** Ahoms annexed kingdom of the Chhutiyas **1581:** Ahoms annexed kingdom of Koch-Hajo **1591:** Cheros were defeated **1662:** Mughals attacked Ahoms **1714-1744:** Sib Singh reigned Ahom kingdom

## Chapter 8 Devotional Paths To The Divine

You may have seen people perform rituals of worship, or singing bhajans, kirtans or qawwalis, or even repeating the name of God in silence, and noticed that some of them are moved to tears. Such intense devotion or love of God is the legacy of various kinds of bhakti and Sufi movements that have evolved since the eighth century.

### The Idea of a Supreme God

Before large kingdoms emerged, different groups of people worshipped their own gods and goddesses. As people were brought together through the growth of towns, trade and empires, new ideas began to develop. The idea that all living things pass through countless cycles of birth and rebirth performing good deeds and bad came to be widely accepted. Similarly, the idea that all human beings are not equal even at birth gained ground during this period. The belief that social privileges came from birth in a “noble” family or a “high” caste was the subject of many learned texts.

Many people were uneasy with such ideas and turned to the teachings of the Buddha or the Jainas according to which it was possible to overcome social differences and break the cycle of rebirth through personal effort. Others felt attracted to the idea of a Supreme God who could deliver humans from such bondage if approached with devotion (or bhakti). This idea, advocated in the Bhagavadgita, grew in popularity in the early centuries of the Common Era.

Shiva, Vishnu and Durga as supreme deities came to be worshipped through elaborate rituals. At the same time, gods and goddesses worshipped in different areas came to be identified with Shiva, Vishnu or Durga. In the process, local myths and legends became a part of the Puranic stories, and methods of worship recommended in the Puranas were introduced into the local cults. Eventually the Puranas also laid down that it was

possible for devotees to receive the grace of God regardless of their caste status. The idea of bhakti became so popular that even Buddhists and Jainas adopted these beliefs.

### A New Kind of Bhakti in South India – Nayanars and Alvars

The seventh to ninth centuries saw the emergence of new religious movements, led by the Nayanars (saints devoted to Shiva) and Alvars (saints devoted to Vishnu) who came from all castes including those considered “untouchable” like the Pulaiyar and the Panars. They were sharply critical of the Buddhists and Jainas and preached ardent love of Shiva or Vishnu as the path to salvation. They drew upon the ideals of love and heroism as found in the Sangam literature (the earliest example of Tamil literature, composed during the early centuries of the Common Era) and blended them with the values of bhakti. The Nayanars and Alvars went from place to place composing exquisite poems in praise of the deities enshrined in the villages they visited, and set them to music.

#### Nayanars and Alvars

There were 63 Nayanars, who belonged to different caste backgrounds such as potters, “untouchable” workers, peasants, hunters, soldiers, Brahmanas and chiefs. The best known among them were Appar, Sambandar, Sundarar and Manikkavasagar. There are two sets of compilations of their songs – Tevaram and Tiruvacakam.

There were 12 Alvars, who came from equally divergent backgrounds, the best known being Periyalvar, his daughter Andal, Tondaradippodi Alvar and Nammalvar. Their songs were compiled in the Divya Prabandham. Between the tenth and twelfth centuries the Chola and Pandya kings built elaborate temples around many of the shrines visited by the saint-poets, strengthening the links between the bhakti tradition and temple worship. This was also the time when their poems were compiled. Besides, **hagiographies** or religious biographies of the Alvars and Nayanars were also composed. Today we use these texts as sources for writing histories of the bhakti tradition.

#### Philosophy and Bhakti

Shankara, one of the most influential philosophers of India, was born in Kerala in the eighth century. He was an advocate of Advaita or the doctrine of the oneness of the individual soul and the Supreme God which is the Ultimate Reality. He taught that Brahman, the only or Ultimate Reality, was formless and without any attributes. He considered the world around us to be an illusion or maya, and preached renunciation of the world and adoption of the path of knowledge to understand the true nature of Brahman and attain salvation.

Ramanuja, born in Tamil Nadu in the eleventh century, was deeply influenced by the Alvars. According to him the best means of attaining salvation was through intense devotion to Vishnu. Vishnu in His grace helps the devotee to attain the bliss of union with Him. He propounded the doctrine of Vishishtadvaita or qualified oneness in that the soul even when united with the Supreme God remained distinct. Ramanuja’s doctrine greatly inspired the new strand of bhakti which developed in north India subsequently.

#### Basavanna’s Virashaivism

We noted earlier the connection between the Tamil bhakti movement and temple worship. This in turn led to a reaction that is best represented in the Virashaiva

movement initiated by Basavanna and his companions like Allama Prabhu and Akkamahadevi. This movement began in Karnataka in the mid-twelfth century. The Virashaivas argued strongly for the equality of all human beings and against Brahmanical ideas about caste and the treatment of women. They were also against all forms of ritual and idol worship.

### The Saints of Maharashtra

From the thirteenth to the seventeenth centuries Maharashtra saw a great number of saint-poets, whose songs in simple Marathi continue to inspire people. The most important among them were Jnaneshwar, Namdev, Eknath and Tukaram as well as women like Sakhubai and the family of Chokhamela, who belonged to the “untouchable” Mahar caste. This regional tradition of bhakti focused on the Vitthala (a form of Vishnu) temple in Pandharpur, as well as on the notion of a personal god residing in the hearts of all people.

These saint-poets rejected all forms of ritualism, outward display of piety and social differences based on birth. In fact they even rejected the idea of renunciation and preferred to live with their families, earning their livelihood like any other person, while humbly serving fellow human beings in need. A new humanist idea emerged as they insisted that bhakti lay in sharing others’ pain. As the famous Gujarati saint Narsi Mehta said, “They are Vaishnavas who understand the pain of others.”

### Nathpanthis, Siddhas and Yogis

A number of religious groups that emerged during this period criticised the ritual and other aspects of conventional religion and the social order, using simple, logical arguments. Among them were the Nathpanthis, Siddhacharas and Yogis. They advocated renunciation of the world. To them the path to salvation lay in meditation on the formless Ultimate Reality and the realisation of oneness with it.

To achieve this they advocated intense training of the mind and body through practices like yogasanas, breathing exercises and meditation. These groups became particularly popular among “low” castes. Their criticism of conventional religion created the ground for devotional religion to become a popular force in northern India.

### Islam and Sufism

The saints had much in common with the Sufis, so much so that it is believed that they adopted many ideas of each other. Sufis were Muslim mystics. They rejected outward religiosity and emphasised love and devotion to God and compassion towards all fellow human beings.

Islam propagated strict monotheism or submission to one God. It also rejected idol worship and considerably simplified rituals of worship into collective prayers. At the same time Muslim scholars developed a holy law called Shariat. The Sufis often rejected the elaborate rituals and codes of behaviour demanded by Muslim religious scholars. They sought union with God much as a lover seeks his beloved with a disregard for the world. Like the saint-poets, the Sufis too composed poems expressing their feelings, and a rich literature in prose, including anecdotes and fables, developed around them. Among the great Sufis of Central Asia were Ghazzali, Rumi and Sadi. Like the Nathpanthis, Siddhas and Yogis, the Sufis too believed that the heart can be trained to look at the world in a different way. They developed elaborate methods of training using zikr (chanting of a name or sacred formula), contemplation, sama (singing),

raqs (dancing), discussion of parables, breath control, etc. under the guidance of a master or pir. Thus emerged the silsilas, a genealogy of Sufi teachers, each following a slightly different method (tariqa) of instruction and ritual practice.

A large number of Sufis from Central Asia settled in Hindustan from the eleventh century onwards. This process was strengthened with the establishment of the Delhi Sultanate, when several major Sufi centres developed all over the subcontinent. The Chishti silsila was among the most influential orders. It had a long line of teachers like Khwaja Muinuddin Chishti of Ajmer, Qutbuddin Bakhtiar Kaki of Delhi, Baba Farid of Punjab, Khwaja Nizamuddin Auliya of Delhi and Bandanawaz Gisudaraz of Gulbarga.

The Sufi masters held their assemblies in their khanqahs or **hospices**. Devotees of all descriptions including members of the royalty and nobility, and ordinary people flocked to these khanqahs. They discussed spiritual matters, sought the blessings of the saints in solving their worldly problems, or simply attended the music and dance sessions.

**Hospice** *House of rest for travellers, especially one kept by a religious order.*

Often people attributed Sufi masters with miraculous powers that could relieve others of their illnesses and troubles. The tomb or dargah of a Sufi saint became a place of pilgrimage to which thousands of people of all faiths thronged. Jalaluddin Rumi was a great thirteenth-century Sufi poet from Iran who wrote in Persian.

### New Religious Developments in North India

The period after the thirteenth century saw a new wave of the bhakti movement in north India. This was an age when Islam, Brahmanical Hinduism, Sufism, various strands of bhakti, and the Nathpanths, Siddhas and Yogis influenced one another. We saw that new towns and kingdoms (Chapters 2, 3 and 4) were emerging, and people were taking up new professions and finding new roles for themselves. Such people, especially craftspersons, peasants, traders and labourers, thronged to listen to these new saints and spread their ideas. Some of them like Kabir and Baba Guru Nanak rejected all orthodox religions. Others like Tulsidas and Surdas accepted existing beliefs and practices but wanted to make these accessible to all. Tulsidas conceived of God in the form of Rama. Tulsidas’s composition, the Ramcharitmanas, written in Awadhi (a language used in eastern Uttar Pradesh), is important both as an expression of his devotion and as a literary work. Surdas was an ardent devotee of Krishna. His compositions, compiled in the Sursagara, Surasaravali and Sahitya Lahari, express his devotion. Also contemporary was Shankaradeva of Assam (late fifteenth century) who emphasised devotion to Vishnu, and composed poems and plays in Assamese. He began the practice of setting up namghars or houses of recitation and prayer, a practice that continues to date.

This tradition also included saints like Dadu Dayal, Ravidas and Mirabai. Mirabai was a Rajput princess married into the royal family of Mewar in the sixteenth century. Mirabai became a disciple of Ravidas, a saint from a caste considered “untouchable”. She was devoted to Krishna and composed innumerable bhajans expressing her intense devotion. Her songs also openly challenged the norms of the “upper” castes and became popular with the masses in Rajasthan and Gujarat. A unique feature of most of the saints is that their works were composed in regional languages and could be sung. They became immensely popular and were handed

down orally from generation to generation. Usually the poorest, most deprived communities and women transmitted these songs, often adding their own experiences. Thus the songs as we have them today are as much a creation of the saints as of generations of people who sang them. They have become a part of our living popular culture.

Beyond the Rana's palace

### A Closer Look: Kabir

Kabir, who probably lived in the fifteenth-sixteenth centuries, was one of the most influential saints. He was brought up in a family of Muslim julahas or weavers settled in or near the city of Benares (Varanasi). We have little reliable information about his life. We get to know of his ideas from a vast collection of verses called *sakhis* and *pads* said to have been composed by him and sung by wandering *bhajan* singers. Some of these were later collected and preserved in the *Guru Granth Sahib*, *Panch Vani* and *Bijak*.

Kabir's teachings were based on a complete, indeed vehement, rejection of the major religious traditions. His teachings openly ridiculed all forms of external worship of both Brahmanical Hinduism and Islam, the pre-eminence of the priestly classes and the caste system. The language of his poetry was a form of spoken Hindi widely understood by ordinary people. He also sometimes used cryptic language, which is difficult to follow.

Kabir believed in a formless Supreme God and preached that the only path to salvation was through *bhakti* or devotion. Kabir drew his followers from among both Hindus and Muslims.

### A Closer Look: Baba Guru Nanak

We know more about Baba Guru Nanak (1469-1539) than about Kabir. Born at Talwandi (Nankana Sahib in Pakistan), he travelled widely before establishing a centre at Kartarpur (Dera Baba Nanak on the river Ravi). A regular worship that consisted of the singing of his own hymns was established there for his followers. Irrespective of their former creed, caste or gender, his followers ate together in the common kitchen (*langar*). The sacred space thus created by Baba Guru Nanak was known as *dharmshala*. It is now known as *Gurdwara*. Before his death in 1539, Baba Guru Nanak appointed one of his followers as his successor. His name was *Lehna* but he came to be known as *Guru Angad*, signifying that he was a part of Baba Guru Nanak himself. *Guru Angad* compiled the compositions of Baba Guru Nanak, to which he added his own in a new script known as *Gurmukhi*.

The three successors of *Guru Angad* also wrote under the name of "Nanak" and all of their compositions were compiled by *Guru Arjan* in 1604. To this compilation were added the writings of other figures like *Shaikh Farid*, *Sant Kabir*, *Bhagat Namdev* and *Guru Tegh Bahadur*. In 1706 this compilation was authenticated by his son and successor, *Guru Gobind Singh*. It is now known as *Guru Granth Sahib*, the holy scripture of the Sikhs.

The number of Baba Guru Nanak's followers increased through the sixteenth century under his successors. They belonged to a number of castes but traders, agriculturists, artisans and craftsmen predominated. This may have something to do with Baba Guru Nanak's insistence that his followers must be householders and should adopt productive and useful occupations. They were also expected to contribute to the general funds of the community of followers.

By the beginning of the seventeenth century the town of *Ramdasapur* (*Amritsar*) had developed around the central *Gurdwara* called *Harmandir Sahib* (Golden Temple). It was virtually self-governing and modern historians refer to the early-seventeenth-century Sikh community as 'a state within the state'. The Mughal emperor *Jahangir* looked upon them as a potential threat and he ordered the execution of *Guru Arjan* in 1606. The Sikh movement began to get politicised in the seventeenth century, a development which culminated in the institution of the *Khalsa* by *Guru Gobind Singh* in 1699. The community of the Sikhs, called the *Khalsa Panth*, became a political entity.

The changing historical situation during the sixteenth and seventeenth centuries influenced the development of the Sikh movement. The ideas of *Baba Guru Nanak* had a huge impact on this development from the very beginning. He emphasised the importance of the worship of one God. He insisted that caste, creed or gender was irrelevant for attaining liberation. His idea of liberation was not that of a state of inert bliss but rather the pursuit of active life with a strong sense of social commitment. He himself used the terms *nam*, *dan* and *isnaan* for the essence of his teaching, which actually meant right worship, welfare of others and purity of conduct. His teachings are now remembered as *nam-japna*, *kirt-karna* and *vand-chhakna*, which also underline the importance of right belief and worship, honest living, and helping others. Thus, *Baba Guru Nanak's* idea of equality had social and political implications. This might partly explain the difference between the history of the followers of *Baba Guru Nanak* and the history of the followers of the other religious figures of the medieval centuries, like *Kabir*, *Ravidas* and *Dadu* whose ideas were very similar to those of *Baba Guru Nanak*.

### ELSEWHERE

#### Martin Luther and the Reformation

The sixteenth century was a time of religious ferment in Europe as well. One of the most important leaders of the changes that took place within Christianity was *Martin Luther* (1483-1546). *Luther* felt that several practices in the Roman Catholic Church went against the teachings of the Bible. He encouraged the use of the language of ordinary people rather than Latin, and translated the Bible into German. *Luther* was strongly opposed to the practice of "indulgences" or making donations to the Church so as to gain forgiveness from sins.

**Important Terms:** *Virashavism*: A movement initiated by *Basavanna* **Bhakti**: Devotion to God **Sufi**: Muslim mystics **Khanqah**: Hospices **Vitthala**: A form of Vishnu **Anecdotes**: Stories **Fables**: Imaginary tales **Sama**: Singing **Raqs**: Classical singing and dancing **Pir**: Master **Tariqa**: Method **Hospice**: House of rest (rest house) for travellers, especially kept by a religious order  
**Important Dates:** 1469-1539: Period of *Guru Nanak* 1604: Compilation of compositions by *Guru Arjan* of previous Gurus 1606: *Guru Arjan* executed 1699: Formation of *Khalsa* by *Guru Govind*

## Chapter 9 The Making Of Regional Cultures

One of the commonest ways of describing people is in terms of the language they speak. When we refer to a person as a Tamil or an Oriya, this usually means that he or she speaks Tamil or Oriya and lives in Tamil Nadu or Orissa. We also tend to associate each region with distinctive kinds of food, clothes, poetry, dance, music and painting. Sometimes we take these identities for



granted and assume that they have existed from time immemorial. However, the frontiers separating regions have evolved over time (and in fact are still changing). Also, what we understand as regional cultures today are often the product of complex processes of intermixing of local traditions with ideas from other parts of the subcontinent. As we will see, some traditions appear specific to some regions, others seem to be similar across regions, and yet others derive from older practices in a particular area, but take a new form in other regions.

### **The Cheras and the Development of Malayalam**

Let us begin by looking at an example of the connection between language and region. The Chera kingdom of Mahodayapuram was established in the ninth century in the south-western part of the peninsula, part of present-day Kerala. It is likely that Malayalam was spoken in this area. The rulers introduced the Malayalam language and script in their inscriptions. In fact, this is one of the earliest examples of the use of a regional language in official records in the subcontinent.

At the same time, the Cheras also drew upon Sanskrit traditions. The temple theatre of Kerala, which is traced to this period, borrowed stories from the Sanskrit epics. The first literary works in Malayalam, dated to about the twelfth century, are directly indebted to Sanskrit. Interestingly enough, a fourteenth-century text, the *Lilatilakam*, dealing with grammar and poetics, was composed in Manipravalam – literally, “diamonds and corals” referring to the two languages, Sanskrit and the regional language.

### **Rulers and Religious Traditions: The Jagannatha Cult**

In other regions, regional cultures grew around religious traditions. The best example of this process is the cult of Jagannatha (literally, lord of the world, a name for Vishnu) at Puri, Orissa. To date, the local tribal people make the wooden image of the deity, which suggests that the deity was originally a local god, who was later identified with Vishnu.

In the twelfth century, one of the most important rulers of the Ganga dynasty, Anantavarman, decided to erect a temple for Purushottama Jagannatha at Puri. Subsequently, in 1230, king Anangabhimha III dedicated his kingdom to the deity and proclaimed himself as the “deputy” of the god.

As the temple gained in importance as a centre of pilgrimage, its authority in social and political matters also increased. All those who conquered Orissa, such as the Mughals, the Marathas and the English East India Company, attempted to gain control over the temple. They felt that this would make their rule acceptable to the local people.

### **The Rajputs and Traditions of Heroism**

In the nineteenth century, the region that constitutes most of present-day Rajasthan, was called Rajputana by the British. While this may suggest that this was an area that was inhabited only or mainly by Rajputs, this is only partly true. There were (and are) several groups who identify themselves as Rajputs in many areas of northern and central India. And of course, there are several peoples other than Rajputs who live in Rajasthan. However, the Rajputs are often recognised as contributing to the distinctive culture of Rajasthan. These cultural traditions were closely linked with the ideals and aspirations of rulers. From about the eighth century, most of the present-day state of Rajasthan was ruled by various Rajput families. Prithviraj was one such

ruler. These rulers cherished the ideal of the hero who fought valiantly, often choosing death on the battlefield rather than face defeat. Stories about Rajput heroes were recorded in poems and songs, which were recited by specially trained minstrels. These preserved the memories of heroes and were expected to inspire others to follow their example. Ordinary people were also attracted by these stories – which often depicted dramatic situations, and a range of strong emotions – loyalty, friendship, love, valour, anger, etc.

Did women find a place within these stories?

Sometimes, they figure as the “cause” for conflicts, as men fought with one another to either “win” or “protect” women. Women are also depicted as following their heroic husbands in both life and death – there are stories about the practice of sati or the immolation of widows on the funeral pyre of their husbands. So those who followed the heroic ideal often had to pay for it with their lives.

### **Beyond Regional Frontiers: The Story of Kathak**

If heroic traditions can be found in different regions in different forms, the same is true of dance. Let us look at the history of one dance form, Kathak, now associated with several parts of north India. The term kathak is derived from *katha*, a word used in Sanskrit and other languages for story. The kathaks were originally a caste of story-tellers in temples of north India, who embellished their performances with gestures and songs. Kathak began evolving into a distinct mode of dance in the fifteenth and sixteenth centuries with the spread of the bhakti movement. The legends of Radha-Krishna were enacted in folk plays called *rasa lila*, which combined folk dance with the basic gestures of the kathak story-tellers.

Under the Mughal emperors and their nobles, Kathak was performed in the court, where it acquired its present features and developed into a form of dance with a distinctive style. Subsequently, it developed in two traditions or *gharanas*: one in the courts of Rajasthan (Jaipur) and the other in Lucknow. Under the patronage of Wajid Ali Shah, the last Nawab of Awadh, it grew into a major art form. By the third quarter of the nineteenth century it was firmly entrenched as a dance form not only in these two regions, but in the adjoining areas of present-day Punjab, Haryana, Jammu and Kashmir, Bihar and Madhya Pradesh. Emphasis was laid on intricate and rapid footwork, elaborate costumes, as well as on the enactment of stories.

Kathak, like several other cultural practices, was viewed with disfavour by most British administrators in the nineteenth and twentieth centuries. However, it survived and continued to be performed by courtesans, and was recognised as one of six “classical” forms of dance in the country after independence.

### **“Classical” dances**

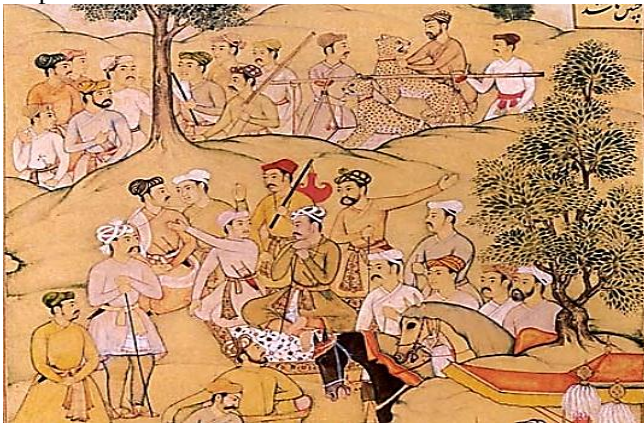
The question of defining any art form as “classical” is often quite complicated. Do we define something as classical if it deals with a religious theme? Or do we consider it classical because it appears to require a great deal of skill acquired through long years of training? Or is it classical because it is performed according to rules that are laid down, and variations are not encouraged? These are questions we need to think about. It is worth remembering that many dance forms that are classified as “folk” also share several of the characteristics considered typical of “classical” forms. So, while the use of the term “classical” may suggest that these forms are superior, this need not always be literally true.

### Other dance forms that are recognised as classical at present are:

Bharatanatyam (Tamil Nadu)  
Kathakali (Kerala)  
Odissi (Orissa)  
Kuchipudi (Andhra Pradesh)  
Manipuri (Manipur)

### Painting for Patrons: The Tradition of Miniatures

Another tradition that developed in different ways was that of miniature painting. Miniatures (as their very name suggests) are small-sized paintings, generally done in water colour on cloth or paper. The earliest miniatures were on palm leaves or wood. Some of the most beautiful of these, found in western India, were used to illustrate Jaina texts. The Mughal emperors Akbar, Jahangir and Shah Jahan patronised highly skilled painters who primarily illustrated manuscripts containing historical accounts and poetry. These were generally painted in brilliant colours and portrayed court scenes, scenes of battle or hunting, and other aspects of social life. They were often exchanged as gifts and were viewed only by an exclusive few – the emperor and his close associates.



*Akbar resting during a hunt, Mughal miniature.*

With the decline of the Mughal Empire, many painters moved out to the courts of the emerging regional states. As a result Mughal artistic tastes influenced the regional courts of the Deccan and the Rajput courts of Rajasthan. At the same time, they retained and developed their distinctive characteristics. Portraits of rulers and court scenes came to be painted, following the Mughal example. Besides, themes from mythology and poetry were depicted at centres such as Mewar, Jodhpur, Bundi, Kota and Kishangarh.



*Maharana Ram Singh II playing holi. Rajput miniature, Kota*

Another region that attracted miniature paintings was the Himalayan foothills around the modern-day state of Himachal Pradesh.

By the late seventeenth century this region had developed a bold and intense style of miniature painting

called Basohli. The most popular text to be painted here was Bhanudatta's Rasamanjari. Nadir Shah's invasion and the conquest of Delhi in 1739 resulted in the migration of Mughal artists to the hills to escape the uncertainties of the plains. Here they found ready patrons which led to the founding of the Kangra school of painting. By the mid-eighteenth century the Kangra artists developed a style which breathed a new spirit into miniature painting. The source of inspiration was the Vaishnavite traditions. Soft colours including cool blues and greens, and a lyrical treatment of themes distinguished Kangra painting.



*Krishna, Radha and her companion, Pahari miniature, Kangra.*

Remember that ordinary women and men painted as well – on pots, walls, floors, cloth – works of art that have occasionally survived, unlike the miniatures that were carefully preserved in palaces for centuries.

### A Closer Look: Bengal

#### The Growth of a Regional Language

As we saw at the outset, we often tend to identify regions in terms of the language spoken by the people. So, we assume that people in Bengal always spoke Bengali. However, what is interesting is that while Bengali is now recognised as a language derived from Sanskrit, early Sanskrit texts (mid-first millennium bce) suggest that the people of Bengal did not speak Sanskritic languages. How, then, did the new language emerge?

From the fourth-third centuries bce, commercial ties began to develop between Bengal and Magadha (south Bihar), which may have led to the growing influence of Sanskrit. During the fourth century the Gupta rulers established political control over north Bengal and began to settle Brahmanas in this area. Thus, the linguistic and cultural influence from the mid-Ganga valley became stronger. In the seventh century the Chinese traveller Xuan Zang observed that languages related to Sanskrit were in use all over Bengal. From the eighth century, Bengal became the centre of a regional kingdom under the Palas. Between the fourteenth and sixteenth centuries, Bengal was ruled by Sultans who were independent of the rulers in Delhi. In 1586, when Akbar conquered Bengal, it formed the nucleus of the Bengal suba. While Persian was the language of administration, Bengali developed as a regional language.

In fact by the fifteenth century the Bengali group of dialects came to be united by a common literary language based on the spoken language of the western part of the region, now known as West Bengal. Thus, although Bengali is derived from Sanskrit, it passed through several stages of evolution. Also, a wide range of non-Sanskrit words, derived from a variety of sources



including tribal languages, Persian, and European languages, have become part of modern Bengali. Early Bengali literature may be divided into two categories – one indebted to Sanskrit and the other independent of it. The first includes translations of the Sanskrit epics, the Mangalakavyas (literally auspicious poems, dealing with local deities) and bhakti literature such as the biographies of Chaitanyadeva, the leader of the Vaishnava bhakti movement.

The second includes Nath literature such as the songs of Maynamati and Gopichandra, stories concerning the worship of Dharma Thakur, and fairy tales, folk tales and ballads.

### Maynamati, Gopichandra and Dharma Thakur

The Naths were ascetics who engaged in a variety of yogic practices.

This particular song, which was often enacted, described how Maynamati, a queen, encouraged her son Gopichandra to adopt the path of asceticism in the face of a variety of obstacles. Dharma Thakur is a popular regional deity, often worshipped in the form of a stone or a piece of wood.

The texts belonging to the first category are easier to date, as several manuscripts have been found indicating that they were composed between the late fifteenth and mid-eighteenth centuries. Those belonging to the second category circulated orally and cannot be precisely dated. They were particularly popular in eastern Bengal, where the influence of Brahmanas was relatively weak.

### Pirs and Temples

From the sixteenth century, people began to migrate in large numbers from the less fertile western Bengal to the forested and marshy areas of south-eastern Bengal. As they moved eastwards, they cleared forests and brought the land under rice cultivation. Gradually, local communities of fisherfolk and shifting cultivators, often tribals, merged with the new communities of peasants. This coincided with the establishment of Mughal control over Bengal with their capital in the heart of the eastern delta at Dhaka. Officials and functionaries received land and often set up mosques that served as centres for religious transformation in these areas. The early settlers sought some order and assurance in the unstable conditions of the new settlements. These were provided by community leaders, who also functioned as teachers and adjudicators and were sometimes ascribed with supernatural powers. People referred to them with affection and respect as pirs.

### Pir

*A Persian word meaning a spiritual guide.* This term included saints or Sufis and other religious personalities, daring colonisers and deified soldiers, various Hindu and Buddhist deities and even **animistic** spirits. The cult of pirs became very popular and their shrines can be found everywhere in Bengal.

**Animism** *Attribution of living soul to plants, inanimate objects, and natural phenomena.*

Bengal also witnessed a temple-building spree from the late fifteenth century, which culminated in the nineteenth century. We have seen that temples and other religious structures were often built by individuals or groups who were becoming powerful – to both demonstrate their power and proclaim their piety. Many of the modest brick and terracotta temples in Bengal were built with the support of several “low” social groups, such as the Kolu (oil pressers) and the Kansari (bell metal workers).

The coming of the European trading companies created new economic opportunities; many families belonging to these social groups availed of these. As their social and economic position improved, they proclaimed their status through the construction of temples. When local deities, once worshipped in thatched huts in villages, gained the recognition of the Brahmanas, their images began to be housed in temples. The temples began to copy the double-roofed (dochala) or four-roofed (chauchala) structure of the thatched huts. This led to the evolution of the typical Bengali style in temple architecture.

In the comparatively more complex four-roofed structure, four triangular roofs placed on the four walls move up to converge on a curved line or a point.

Temples were usually built on a square platform. The interior was relatively plain, but the outer walls of many temples were decorated with paintings, ornamental tiles or terracotta tablets.

In some temples, particularly in Vishnupur in the Bankura district of West Bengal, such decorations reached a high degree of excellence.

### Fish as Food

Traditional food habits are generally based on locally available items of food. Bengal is a riverine plain which produces plenty of rice and fish. Understandably, these two items figure prominently in the menu of even poor Bengalis. Fishing has always been an important occupation and Bengali literature contains several references to fish. What is more, terracotta plaques on the walls of temples and viharas (Buddhist monasteries) depict scenes of fish being dressed and taken to the market in baskets.

Brahmanas were not allowed to eat non-vegetarian food, but the popularity of fish in the local diet made the Brahmanical authorities relax this prohibition for the Bengal Brahmanas. The Brihaddharma Purana, a thirteenth-century Sanskrit text from Bengal, permitted the local Brahmanas to eat certain varieties of fish.

### ELSEWHERE

#### Emergence of nation-states in Europe

Till the eighteenth century, people in Europe saw themselves as subjects of an empire, such as the Austro-Hungarian empire, or members of a church, such as the Greek Orthodox church. But, from the late eighteenth century, people also began to identify themselves as members of a community that spoke a common language, such as French or German. By the early nineteenth century, in Rumania school textbooks began to be written in Rumanian rather than in Greek, and in Hungary Hungarian was adopted as the official language instead of Latin. These and other similar developments created the consciousness among the people that each linguistic community was a separate nation. This feeling was strengthened by the movements for Italian and German unification in the late nineteenth century.

**Important Terms: Classical:** Relating to ancient Greek or Latin Literature, art or culture. **Miniature:** Small sized paintings **Pir:** A Persian word meaning a ‘spiritual guide’.

**Dialect:** A variety of language. **Basohli:** Bold and intense style of miniature painting. **Animism:** Attribution of living soul to plants, inanimate objects and natural phenomena. **Indo-Persian Music:** The music which developed with the fusion of Indian Persian-Arabic style is known as Indo-Persian style of music.

**Important Dates: Twelfth century:** Ganga dynasty ruler Anantavarman decided to build a temple for Purushottama Jagannath at Puri **Late seventeenth century:** Basohli style of miniature painting developed **1739:** Nadir Shah's invasion and conquest of Delhi





# NCERT Class 8

## History (Our Pasts - III)

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 How, When And Where

##### Quick Review

- History is certainly about changes that occur over a period of time. It is about finding out how things were in the past and how they have changed overtime.
- In 1817, James Mill, a Scottish economist and political philosopher, published a massive three-volume work—A History of British India. In this, he divided Indian history into three periods – Hindu, Muslim and British. This periodization came to be widely accepted.
- We try and divide history into different periods to capture the characteristics of time and its central features as they appear to us.
- Moving away from British classification, historians have usually divided Indian history into 'Ancient', 'Medieval' and 'modern'.

##### Events covered in Modern History of India?

The events covered in the Modern History of India are:

- (i) Establishment of company rule.
- (ii) The set up of British administration system i.e. land revenue, economic policies, etc.
- (iii) The first War of India's Independence—The Revolt of 1857.
- (iv) End of Mughal Empire.
- (v) Direct control over India by British Government.
- (vi) The new socio-economic reform movement began in India.
- (vii) The role of National leaders or era of rise of Nationalism.
- (viii) Freedom Movement and Independence.

##### How Important are Dates?

- (i) History is a record of significant events that have occurred over a period of time or on a particular day in the past.
- (ii) History is a subject which deals with past events, such as when a battle was fought, period of dynasties, when a king was crowned, birth of any religion and various other changes, etc.
- (iii) History is also important to know the exact date and year of any particular event.
- (iv) Hence, we continue to associate history with a string of dates, since details of any such events which have occurred in the past cannot be determined without referring to the specific dates. So, in other words, we can say that history is synonymous with dates.

##### How do we periodise in History?

- (i) History is a record of significant events written in chronological order.
- (ii) It is the subject from where we find out how things were in the past and how things have changed in the past.
- (iii) We periodise a time in order to characterise it into different periods on the basis of some significant events

that have happened during those days.

(iv) These demarcations of time into different periods in the past is known as 'Periodisation', which become important for history.

(v) They help to reflect our ideas quickly about the happenings and changes from one period to the next.

##### Method of periodization of the English historians

- (i) The British historians divided Indian history into three periods, namely, ancient, medieval and modern.
- (ii) This method of periodization was not suitable in context to India because this method had various limitations.
- (iii) Except in Europe, we cannot find any such type of sequence and evidence to define these three ages in any other country in the world.
- (iv) The Britishers came in India and rule over here without following the principles of equality, freedom, democracy, etc.
- (v) In Europe, presence of these symbols denoted modern age.

##### What is 'Colonization'?

- (i) In history we can find that whenever one country invaded or conquered another, it brought about some changes in the society in terms of values, customs and practices.
- (ii) These kind of political, economic, social and cultural changes as a result of subjugation of one country by another are termed as 'Colonization' in history.

##### Britishers ways of writing the history

- (i) Literary sources prove to be most important in gaining knowledge about past events.
- (ii) The Britishers laid the foundation of keeping records of each and every plan, policy, decision, instruction, agreement and treaty, etc.
- (iii) They started preserving important written documents such as letters, memos, etc.
- (iv) Record rooms were established across all the important offices in rural as well as urban areas.
- (v) Later, archives and museums were established to protect these records and documents so that they could be accessed in the future.

##### What is a Survey?

- (i) Survey means a study or investigation of important facts and figures regarding a particular subject, topic or a country for acquiring additional and specific information for further study or investigation.
- (ii) In the early 19<sup>th</sup> century, detailed surveys were conducted throughout the country in almost all the major fields.
- (iii) Such as, the topography, studying the cropping pattern.
- (iv) Botanical surveys, zoological surveys, archeological surveys, anthropological surveys and forest surveys, etc.
- (v) In order to collect necessary information regarding the country.

##### What Historians draw from Surveys

- (i) Surveys in any field are very important and crucial in the sense that they help one to collect the right data, figures, information and reports regarding a subject.
- (ii) For a historian, surveys are equally important because a historian studies facts about history.
- (iii) For the historians, archeological surveys are important because they deal with the past.
- (iv) A historian can come across certain information like the ancient civilizations, the behaviors of human beings in the past, structure of the society, the culture and the traditions, habits and their livelihood.
- (v) These are important because the historians can assess actual information prevalent during the period and what transformation has been brought or will be taking place in future.

### Official records a Critic

One important source of Indian history is the official record of the British administration. The Britishers believed that the act of writing was important. Every instruction, plan, policy decision, agreement and investigation had to be clearly written up.

- (i) No, because they provide the views of people who are in power.
- (ii) They are usually biased and provide only an official view of an incident, which cannot be deemed to be a right source of information with common man's point of view.

**Important Dates:** 1773: Warren Hastings, an English statesman, became the first Governor General of India. 1782: James Rennel produced the first map. 1817: "A History of British India", a massive 3-volume work, was produced by James Mill. 1920s: The National Archives of India came up.

## Chapter 2 From Trade To Territory

### The Company Establishes Power

Aurangzeb was the last of the powerful Mughal rulers. He established control over a very large part of the territory that is now known as India. After his death in 1707, many Mughal governors (subadars) and big zamindars began asserting their authority and establishing regional kingdoms. As powerful regional kingdoms emerged in various parts of India, Delhi could no longer function as an effective centre.

By the second half of the eighteenth century, however, a new power was emerging on the political horizon – the British. Did you know that the British originally came as a small trading company and were reluctant to acquire territories? How then did they come to be masters of a vast empire? In this chapter you will see how this came about.

### East India Company Comes East

In 1600, the East India Company acquired a charter from the ruler of England, Queen Elizabeth I, granting it the sole right to trade with the East. This meant that no other trading group in England could compete with the East India Company. With this charter the Company could venture across the oceans, looking for new lands from which it could buy goods at a cheap price, and carry them back to Europe to sell at higher prices. The Company did not have to fear competition from other English trading companies. Mercantile trading companies in those days made profit primarily by excluding competition, so that they could buy cheap and sell dear.



– Routes to India in the eighteenth century

**Mercantile** – A business enterprise that makes profit primarily through trade, buying goods cheap and selling them at higher prices

The royal charter, however, could not prevent other European powers from entering the Eastern markets. By the time the first English ships sailed down the west coast of Africa, round the Cape of Good Hope, and crossed the Indian Ocean, the Portuguese had already established their presence in the western coast of India, and had their base in Goa. In fact, it was Vasco da Gama, a Portuguese explorer, who had discovered this sea route to India in 1498. By the early seventeenth century, the Dutch too were exploring the possibilities of trade in the Indian Ocean. Soon the French traders arrived on the scene.

The problem was that all the companies were interested in buying the same things. The fine qualities of cotton and silk produced in India had a big market in Europe. Pepper, cloves, cardamom and cinnamon too were in great demand. Competition amongst the European companies inevitably pushed up the prices at which these goods could be purchased, and this reduced the profits that could be earned. The only way the trading companies could flourish was by eliminating rival competitors. The urge to secure markets therefore led to fierce battles between the trading companies. Through the seventeenth and eighteenth centuries they regularly sank each other's ships, blockaded routes, and prevented rival ships from moving with supplies of goods. Trade was carried on with arms and trading posts were protected through fortification.

This effort to fortify settlements and carry on profitable trade also led to intense conflict with local rulers. The company therefore found it difficult to separate trade from politics. Let us see how this happened.

### East India Company begins trade in Bengal

The first English factory was set up on the banks of the river Hugli in 1651. This was the base from which the Company's traders, known at that time as "factors", operated. The factory had a warehouse where goods for export were stored, and it had offices where Company officials sat. As trade expanded, the Company persuaded merchants and traders to come and settle near the factory. By 1696 it began building a fort around the settlement. Two years later it bribed Mughal officials into giving the Company zamindari rights over three villages. One of these was Kalikata, which later grew into the city of Calcutta or Kolkata as it is known today. It also persuaded the Mughal emperor Aurangzeb to issue a farman granting the Company the right to trade duty free. **Farman** – A royal edict, a royal order. The Company tried continuously to press for more concessions and manipulate existing privileges. Aurangzeb's farman, for instance, had granted only the Company the right to trade duty free. But officials of the



Company, who were carrying on private trade on the side, were expected to pay duty. This they refused to pay, causing an enormous loss of revenue for Bengal. How could the Nawab of Bengal, Murshid Quli Khan, not protest?

### How trade led to battles

Through the early eighteenth century the conflict between the Company and the nawabs of Bengal intensified. After the death of Aurangzeb, the Bengal nawabs asserted their power and autonomy, as other regional powers were doing at that time. Murshid Quli Khan was followed by Alivardi Khan and then Sirajuddaulah as the Nawab of Bengal. Each one of them was a strong ruler. They refused to grant the Company concessions, demanded large tributes for the Company's right to trade, denied it any right to mint coins, and stopped it from extending its fortifications. Accusing the Company of deceit, they claimed that the Company was depriving the Bengal government of huge amounts of revenue and undermining the authority of the nawab. It was refusing to pay taxes, writing disrespectful letters, and trying to humiliate the nawab and his officials.

The Company on its part declared that the unjust demands of the local officials were ruining the trade of the Company, and trade could flourish only if the duties were removed. It was also convinced that to expand trade it had to enlarge its settlements, buy up villages, and rebuild its forts. The conflicts led to confrontations and finally culminated in the famous Battle of Plassey.

### The Battle of Plassey

When Alivardi Khan died in 1756, Sirajuddaulah became the nawab of Bengal. The Company was worried about his power and keen on a puppet ruler who would willingly give trade concessions and other privileges. So it tried, though without success, to help one of Sirajuddaulah's rivals become the nawab. An infuriated Sirajuddaulah asked the Company to stop meddling in the political affairs of his dominion, stop fortification, and pay the revenues. After negotiations failed, the Nawab marched with 30,000 soldiers to the English factory at Kassimbazar, captured the Company officials, locked the warehouse, disarmed all Englishmen, and blockaded English ships. Then he marched to Calcutta to establish control over the Company's fort there. On hearing the news of the fall of Calcutta, Company officials in Madras sent forces under the command of Robert Clive, reinforced by naval fleets. Prolonged negotiations with the Nawab followed. Finally, in 1757, Robert Clive led the Company's army against Sirajuddaulah at Plassey.

One of the main reasons for the defeat of the Nawab was that the forces led by Mir Jafar, one of Sirajuddaulah's commanders, never fought the battle. Clive had managed to secure his support by promising to make him nawab after crushing Sirajuddaulah. The Battle of Plassey became famous because it was the first major victory the Company won in India.

After the defeat at Plassey, Sirajuddaulah was assassinated and Mir Jafar made the nawab. The Company was still unwilling to take over the responsibility of administration. Its prime objective was the expansion of trade. If this could be done without conquest, through the help of local rulers who were willing to grant privileges, then territories need not be taken over directly.

Soon the Company discovered that this was rather difficult. For even the puppet nawabs were not always

as helpful as the Company wanted them to be. After all, they had to maintain a basic appearance of dignity and sovereignty if they wanted respect from their subjects. What could the Company do? When Mir Jafar protested, the Company deposed him and installed Mir Qasim in his place. When Mir Qasim complained, he in turn was defeated in a battle fought at Buxar (1764), driven out of Bengal, and Mir Jafar was reinstalled. The Nawab had to pay Rs 500,000 every month but the Company wanted more money to finance its wars, and meet the demands of trade and its other expenses. It wanted more territories and more revenue. By the time Mir Jafar died in 1765 the mood of the Company had changed. Having failed to work with puppet nawabs, Clive declared: "We must indeed become nawabs ourselves."

Finally, in 1765 the Mughal emperor appointed the Company as the Diwan of the provinces of Bengal. The Diwani allowed the Company to use the vast revenue resources of Bengal. This solved a major problem that the Company had earlier faced. From the early eighteenth century its trade with India had expanded. But it had to buy most of the goods in India with gold and silver imported from Britain. This was because at this time Britain had no goods to sell in India. The outflow of gold from Britain slowed after the Battle of Plassey, and entirely stopped after the assumption of Diwani. Now revenues from India could finance Company expenses. These revenues could be used to purchase cotton and silk textiles in India, maintain Company troops, and meet the cost of building the Company fort and offices at Calcutta.

### Company officials become "nabobs"

What did it mean to be nawabs? It meant of course that the Company acquired more power and authority. But it also meant something else. Each company servant began to have visions of living like nawabs.

After the Battle of Plassey the actual nawabs of Bengal were forced to give land and vast sums of money as personal gifts to Company officials. Robert Clive himself amassed a fortune in India. He had come to Madras (now Chennai) from England in 1743 at the age of 18. When in 1767 he left India his Indian fortune was worth £401,102. Interestingly, when he was appointed Governor of Bengal in 1764, he was asked to remove corruption in Company administration but he was himself cross-examined in 1772 by the British Parliament which was suspicious of his vast wealth. Although he was acquitted, he committed suicide in 1774.

However, not all Company officials succeeded in making money like Clive. Many died an early death in India due to disease and war and it would not be right to regard all of them as corrupt and dishonest. Many of them came from humble backgrounds and their uppermost desire was to earn enough in India, return to Britain and lead a comfortable life. Those who managed to return with wealth led flashy lives and flaunted their riches. They were called "nabobs" – an anglicised version of the Indian word nawab. They were often seen as upstarts and social climbers in British society and were ridiculed or made fun of in plays and cartoons.

### Company Rule Expands

If we analyse the process of annexation of Indian states by the East India Company from 1757 to 1857, certain key aspects emerge. The Company rarely launched a direct military attack on an unknown territory. Instead it used a variety of political, economic and diplomatic methods to extend its influence before annexing an

Indian kingdom.

After the Battle of Buxar (1764), the Company appointed Residents in Indian states. They were political or commercial agents and their job was to serve and further the interests of the Company. Through the Residents, the Company officials began interfering in the internal affairs of Indian states. They tried to decide who was to be the successor to the throne, and who was to be appointed in administrative posts. Sometimes the Company forced the states into a “subsidiary alliance”. According to the terms of this alliance, Indian rulers were not allowed to have their independent armed forces. They were to be protected by the Company, but had to pay for the “subsidiary forces” that the Company was supposed to maintain for the purpose of this protection. If the Indian rulers failed to make the payment, then part of their territory was taken away as penalty. For example, when Richard Wellesley was Governor-General (1798-1805), the Nawab of Awadh was forced to give over half of his territory to the Company in 1801, as he failed to pay for the “subsidiary forces”. Hyderabad was also forced to cede territories on similar grounds.

### Tipu Sultan – The “Tiger of Mysore”

The Company resorted to direct military confrontation when it saw a threat to its political or economic interests. This can be illustrated with the case of the southern Indian state of Mysore.

Mysore had grown in strength under the leadership of powerful rulers like Haidar Ali (ruled from 1761 to 1782) and his famous son Tipu Sultan (ruled from 1782 to 1799). Mysore controlled the profitable trade of the Malabar coast where the Company purchased pepper and cardamom. In 1785 Tipu Sultan stopped the export of sandalwood, pepper and cardamom through the ports of his kingdom, and disallowed local merchants from trading with the Company. He also established a close relationship with the French in India, and modernised his army with their help.

*The Company forces were defeated by Haidar Ali and Tipu Sultan in several battles. But in 1792, attacked by the combined forces of the Marathas, the Nizam of Hyderabad and the Company, Tipu was forced to sign a treaty with the British by which two of his sons were taken away as hostages. British painters always liked painting scenes that showed the triumph of British power.*

The British were furious. They saw Haidar and Tipu as ambitious, arrogant and dangerous – rulers who had to be controlled and crushed. Four wars were fought with Mysore (1767-69, 1780-84, 1790-92 and 1799). Only in the last – the Battle of Seringapatam – did the Company ultimately win a victory. Tipu Sultan was killed defending his capital Seringapatam, Mysore was placed under the former ruling dynasty of the Wodeyars and a subsidiary alliance was imposed on the state.

### The legend of Tipu

Kings are often surrounded by legend and their powers glorified through folklore. Here is a legend about Tipu Sultan who became the ruler of Mysore in 1782. It is said that once he went hunting in the forest with a French friend. There he came face to face with a tiger. His gun did not work and his dagger fell to the ground. He battled with the tiger unarmed until he managed to reach down and pick up the dagger. Finally he was able to kill the tiger in the battle. After this he came to be known as the “Tiger of Mysore”. He had the image of the tiger on his flag.

## Confederacy – Alliance

### War with the Marathas

From the late eighteenth century the Company also sought to curb and eventually destroy Maratha power. With their defeat in the Third Battle of Panipat in 1761, the Marathas’ dream of ruling from Delhi was shattered. They were divided into many states under different chiefs (sardars) belonging to dynasties such as Sindhia, Holkar, Gaikwad and Bhonsle. These chiefs were held together in a **confederacy** under a Peshwa (Principal Minister) who became its effective military and administrative head based in Pune. Mahadji Sindhia and Nana Phadnis were two famous Maratha soldiers and statesmen of the late eighteenth century.

The Marathas were subdued in a series of wars. In the first war that ended in 1782 with the Treaty of Salbai, there was no clear victor. The Second Anglo-Maratha War (1803-05) was fought on different fronts, resulting in the British gaining Orissa and the territories north of the Yamuna river including Agra and Delhi. Finally, the Third Anglo-Maratha War of 1817-19 crushed Maratha power. The Peshwa was removed and sent away to Bithur near Kanpur with a pension. The Company now had complete control over the territories south of the Vindhyas.

### The claim to paramountcy

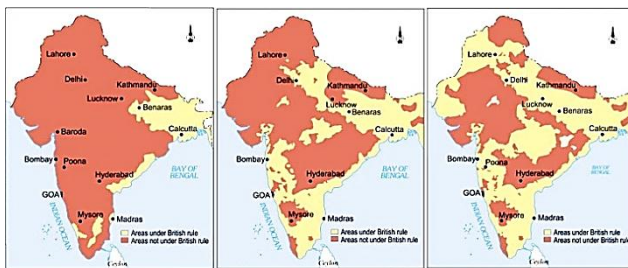
It is clear from the above that from the early nineteenth century the Company pursued an aggressive policy of territorial expansion. Under Lord Hastings (Governor-General from 1813 to 1823) a new policy of “paramountcy” was initiated. Now the Company claimed that its authority was paramount or supreme, hence its power was greater than that of Indian states. In order to protect its interests it was justified in annexing or threatening to annex any Indian kingdom. This view continued to guide later British policies as well.

This process, however, did not go unchallenged. For example, when the British tried to annex the small state of Kitoor (in Karnataka today), Rani Channamma took to arms and led an anti-British resistance movement. She was arrested in 1824 and died in prison in 1829. But Rayanna, a poor chowkidar of Sangoli in Kitoor, carried on the resistance. With popular support he destroyed many British camps and records. He was caught and hanged by the British in 1830. You will read more about several cases of resistance later in the book.

In the late 1830s the East India Company became worried about Russia. It imagined that Russia might expand across Asia and enter India from the north-west. Driven by this fear, the British now wanted to secure their control over the north-west. They fought a prolonged war with Afghanistan between 1838 and 1842 and established indirect Company rule there. Sind was taken over in 1843. Next in line was Punjab. But the presence of Maharaja Ranjit Singh held back the Company. After his death in 1839, two prolonged wars were fought with the Sikh kingdom. Ultimately, in 1849, Punjab was annexed.

### The Doctrine of Lapse

The final wave of annexations occurred under Lord Dalhousie who was the Governor-General from 1848 to 1856. He devised a policy that came to be known as the Doctrine of Lapse. The doctrine declared that if an Indian ruler died without a male heir his kingdom would “lapse”, that is, become part of Company territory. One kingdom after another was annexed simply by applying this doctrine: Satara (1848), Sambalpur (1850), Udaipur (1852), Nagpur (1853) and Jhansi (1854).



**1797                      1840                      1857**

### *Expansion of British territorial power in India*

*Look at these maps along with a present-day political map of India. In each of these maps, try and identify the different parts of India that were not under British rule.*

Finally, in 1856, the Company also took over Awadh. This time the British had an added argument – they said they were “obliged by duty” to take over Awadh in order to free the people from the “misgovernment” of the Nawab. Enraged by the humiliating way in which the Nawab was deposed, the people of Awadh joined the great revolt that broke out in 1857.

### **Setting up a New Administration**

Warren Hastings (Governor-General from 1773 to 1785) was one of the many important figures who played a significant role in the expansion of Company power. By his time the Company had acquired power not only in Bengal, but also in Bombay and Madras. British territories were broadly divided into administrative units called Presidencies. There were three Presidencies: Bengal, Madras and Bombay. Each was ruled by a Governor. The supreme head of the administration was the Governor-General. Warren Hastings, the first Governor-General, introduced several administrative reforms, notably in the sphere of justice.

**Qazi** – A judge

**Mufti** – A jurist of the Muslim community responsible for expounding the law that the qazi would administer

**Impeachment** – A trial by the House of Lords in England for charges of misconduct brought against a person in the House of Commons

From 1772 a new system of justice was established. Each district was to have two courts – a criminal court (faujdari adalat) and a civil court (diwani adalat). Maulvis and Hindu pandits interpreted Indian laws for the European district collectors who presided over civil courts. The criminal courts were still under a qazi and a mufti but under the supervision of the collectors.

*When Warren Hastings went back to England in 1785, Edmund Burke accused him of being personally responsible for the misgovernment of Bengal. This led to an **impeachment** proceeding in the British Parliament that lasted seven years.*

A major problem was that the Brahman pandits gave different interpretations of local laws based on different schools of the dharmashastra. To bring about uniformity, in 1775 eleven pandits were asked to compile a digest of Hindu laws. N.B. Halhed translated this digest into English. By 1778 a code of Muslim laws was also compiled for the benefit of European judges. Under the Regulating Act of 1773, a new Supreme Court was established, while a court of appeal – the Sadar Nizamat Adalat – was also set up at Calcutta. The principal figure in an Indian district was the Collector. As the title suggests, his main job was to collect revenue and taxes and maintain law and order in his district with the help of judges, police officers and darogas. His office – the Collectorate – became the new

centre of power and patronage that steadily replaced previous holders of authority.

### **The Company army**

Colonial rule in India brought in some new ideas of administration and reform but its power rested on its military strength. The Mughal army was mainly composed of cavalry (sawars: trained soldiers on horseback) and infantry, that is, paidal (foot) soldiers. They were given training in archery (teer-andazi) and the use of the sword. The cavalry dominated the army and the Mughal state did not feel the need to have a large professionally trained infantry. The rural areas had a large number of armed peasants and the local zamindars often supplied the Mughals with paidal soldiers.

A change occurred in the eighteenth century when Mughal successor states like Awadh and Benaras started recruiting peasants into their armies and training them as professional soldiers. The East India Company adopted the same method when it began recruitment for its own army, which came to be known as the sepoy army (from the Indian word sipahi, meaning soldier).

**Sawar** – Men on horses

**Musket** – A heavy gun used by infantry soldiers

**Matchlock** – An early type of gun in which the powder was ignited by a match

*In the early nineteenth century the British began to develop a uniform military culture. Soldiers were increasingly subjected to European-style training, drill and discipline that regulated their life far more than before. Often this created problems since caste and community feelings were ignored in building a force of professional soldiers. Could individuals so easily give up their caste and religious feelings? Could they see themselves only as soldiers and not as members of communities?*

As warfare technology changed from the 1820s, the cavalry requirements of the Company's army declined. This is because the British empire was fighting in Burma, Afghanistan and Egypt where soldiers were armed with **muskets** and **matchlocks**. The soldiers of the Company's army had to keep pace with changing military requirements and its infantry regiments now became more important.

What did the sepoys feel? How did they react to the changes in their lives and their identity – that is, their sense of who they were? The Revolt of 1857 gives us a glimpse into the world of the sepoys. You will read about this revolt in Chapter 5.

### **Conclusion**

Thus the East India Company was transformed from a trading company to a territorial colonial power. The arrival of new steam technology in the early nineteenth century also aided this process. Till then it would take anywhere between six and eight months to travel to India by sea. Steamships reduced the journey time to three weeks enabling more Britishers and their families to come to a far-off country like India. By 1857 the Company came to exercise direct rule over about 63 per cent of the territory and 78 per cent of the population of the Indian subcontinent. Combined with its indirect influence on the remaining territory and population of the country, the East India Company had virtually the whole of India under its control.

### **ELSEWHERE**

#### **Slave Trade in South Africa**

The Dutch trading ships reached southern Africa in the seventeenth century. Soon a slave trade began. People



were captured, chained, and sold in slave markets. When slavery ended in 1834 there were 36,774 privately owned slaves at the Cape – located at the southern most tip of Africa.

A visitor to the Cape in 1824 has left a moving account of what he saw at a slave auction:

Having learned that there was to be sale of cattle, farm-stock, etc by auction, ... we halted our wagon for the purpose of procuring fresh oxen. Among the stock ... was a female slave and her three children. The farmers examined them, as if they had been so many head of cattle. They were sold separately, and to different purchasers. The tears, the anxiety, the anguish of the mother, while she ... cast heart-rending look upon her children, and the simplicity and touching sorrow of the poor young ones while they clung to their distracted parent ... contrasted with the marked insensitivity and jocular countenances of the spectators

**Important Terms:** **Mercantile:** A business enterprise that makes profit primarily through trade, buying goods cheap and selling them at higher prices. **Farman:** A royal edict; a royal order. **Puppet ruler:** The term is used disapprovingly to refer to a person who is controlled by someone else. **Injunction:** An instruction. **Subservience:** Willingness to obey others unquestioningly. **Confederacy:** An alliance. **Paramountcy:** Chief in importance of impact; supreme. **Qazi:** A judge. **Mufti:** A Muslim legal expert who is empowered to give rulings on religious matters. **Impeachment:** The action of calling into question the integrity or validity of something. **Dharmashastras:** Sanskrit texts prescribing social rules and codes of behaviour, composed from c. 500 BCE onwards. **Sawar:** Men on horses. **Musket:** A heavy gun used by infantry soldiers. **Matchlock:** An old type of gun in which the powder was ignited by a match. **Steamships:** Ships which are propelled by steam engine.

**Important Dates:** **1498:** Portuguese explorer Vasco da Gama discovered the sea route to India. **1600:** Queen Elizabeth I granted a charter to East India Company allowing it to trade with the east. **1650-1750:** The Europeans came into India during this period in the form of traders. **1651:** First English factory set up on the banks of river Hugli. **1696:** East India Company started building a fort around its settlement. **1700-1750:** Segregation of Mughal Empire; Start of British conquest upon India. **1707:** Death of Aurangzeb. **1756:** Death of Alivardi Khan; Sirajuddaulah became the Nawab of Bengal. **1761-1782:** Hyder Ali ruled upon Mysore. **1757:** Battle of Plassey. **1764:** Battle of Buxar. **1765:** Death of Mir Jafar; East India Company was appointed the Diwan of provinces of Bengal by the Mughal Emperor. **1767-1769:** First Anglo-Mysore War. **1775-1782:** First Anglo-Maratha War. **1780-1784:** Second Anglo-Mysore War. **1782-1799:** Tipu Sultan ruled upon Mysore. **1785:** Tipu Sultan banned the export of sandalwood, pepper and cardamom through his kingdom and prohibited local merchants from trading with the Company. **1790-92:** Third Anglo-Mysore War. **1799:** Fourth Anglo-Mysore War. Tipu Sultan was killed in this battle. **1801:** Nawab of Awadh forced to give half of his territory to the Company. **1803-1805:** Second Anglo-Maratha War. **1817-1819:** Third Anglo-Maratha War. **1813-1823:** Lord Hastings was the Governor General of India. **1849:** Annexation of Punjab. **1848-1856:** Lord Dalhousie was the Governor General of India. **1848:** Annexation of Satara. **1850:** Annexation of Sambalpur. **1852:** Annexation of Udaipur. **1853:** Annexation of Nagpur. **1854:** Annexation of Jhansi. **1856:** Annexation of Awadh. **1857:** Start of War of Indian Independence

administering the land and organising its revenue resources. A trading company had also to ensure that it could buy the products it needed and sell what it wanted.

Over the years the Company also learnt that it had to move with some caution. Being an alien power, it needed to pacify those who in the past had ruled the countryside, and enjoyed authority and prestige. Those who had held local power had to be controlled but they could not be entirely eliminated.

How was this to be done? In this chapter we will see how the Company came to colonise the countryside, organise revenue resources, redefine the rights of people, and produce the crops it wanted.

### Revenue for the Company

The Company had become the Diwan, but it still saw itself primarily as a trader. It wanted a large revenue income but was unwilling to set up any regular system of assessment and collection. The effort was to increase the revenue as much as it could and buy fine cotton and silk cloth as cheaply as possible. Within five years the value of goods bought by the Company in Bengal doubled. Before 1865, the Company had purchased goods in India by importing gold and silver from Britain. Now the revenue collected in Bengal could finance the purchase of goods for export.

Soon it was clear that the Bengal economy was facing a deep crisis. Artisans were deserting villages since they were being forced to sell their goods to the Company at low prices. Peasants were unable to pay the dues that were being demanded from them. Artisanal production was in decline, and agricultural cultivation showed signs of collapse. Then in 1770 a terrible famine killed ten million people in Bengal. About one-third of the population was wiped out.

### The need to improve agriculture

If the economy was in ruins, could the Company be certain of its revenue income? Most Company officials began to feel that investment in land had to be encouraged and agriculture had to be improved. How was this to be done? After two decades of debate on the question, the Company finally introduced the Permanent Settlement in 1793. By the terms of the settlement, the rajas and taluqdars were recognised as zamindars. They were asked to collect rent from the peasants and pay revenue to the Company. The amount to be paid was fixed permanently, that is, it was not to be increased ever in future. It was felt that this would ensure a regular flow of revenue into the Company's coffers and at the same time encourage the zamindars to invest in improving the land. Since the revenue demand of the state would not be increased, the zamindar would benefit from increased production from the land.

### The problem

The Permanent Settlement, however, created problems. Company officials soon discovered that the zamindars were in fact not investing in the improvement of land. The revenue that had been fixed was so high that the zamindars found it difficult to pay. Anyone who failed to pay the revenue lost his zamindari. Numerous zamindaris were sold off at auctions organised by the Company. *Cornwallis was the Governor-General of India when the Permanent Settlement was introduced.* By the first decade of the nineteenth century the situation changed. The prices in the market rose and cultivation slowly expanded. This meant an increase in the income of the zamindars but no gain for the Company since it could not increase a revenue demand

## Chapter 3 Ruling The Countryside

### The Company Becomes the Diwan

On 12 August 1765, the Mughal emperor appointed the East India Company as the Diwan of Bengal. As Diwan, the Company became the chief financial administrator of the territory under its control. Now it had to think of

that had been fixed permanently. Even then the zamindars did not have an interest in improving the land. Some had lost their lands in the earlier years of the settlement; others now saw the possibility of earning without the trouble and risk of investment. As long as the zamindars could give out the land to tenants and get rent, they were not interested in improving the land.

### A new system is devised

By the early nineteenth century many of the Company officials were convinced that the system of revenue had to be changed again. How could revenues be fixed permanently at a time when the Company needed more money to meet its expenses of administration and trade? In the North Western Provinces of the Bengal Presidency (most of this area is now in Uttar Pradesh), an Englishman called Holt Mackenzie devised the new system which came into effect in 1822. He felt that the village was an important social institution in north Indian society and needed to be preserved. Under his directions, collectors went from village to village, inspecting the land, measuring the fields, and recording the customs and rights of different groups. The estimated revenue of each plot within a village was added up to calculate the revenue that each village (**mahal**) had to pay. This demand was to be revised periodically, not permanently fixed. The charge of collecting the revenue and paying it to the Company was given to the village headman, rather than the zamindar. This system came to be known as the mahalwari settlement.

### The Munro system

In the British territories in the south there was a similar move away from the idea of Permanent Settlement. The new system that was devised came to be known as the ryotwar (or ryotwari). It was tried on a small scale by Captain Alexander Read in some of the areas that were taken over by the Company after the wars with Tipu Sultan. Subsequently developed by Thomas Munro, this system was gradually extended all over south India. Read and Munro felt that in the south there were no traditional zamindars. The settlement, they argued, had to be made directly with the cultivators (ryots) who had tilled the land for generations. Their fields had to be carefully and separately surveyed before the revenue assessment was made. Munro thought that the British should act as paternal father figures protecting the ryots under their charge.

### All was not well

Within a few years after the new systems were imposed it was clear that all was not well with them. Driven by the desire to increase the income from land, revenue officials fixed too high a revenue demand. Peasants were unable to pay, ryots fled the countryside, and villages became deserted in many regions. Optimistic officials had imagined that the new systems would transform the peasants into rich enterprising farmers. But this did not happen.

### Crops for Europe

The British also realised that the countryside could not only yield revenue, it could also grow the crops that Europe required. By the late eighteenth century the Company was trying its best to expand the cultivation of opium and indigo. In the century and a half that followed, the British persuaded or forced cultivators in various parts of India to produce other crops: jute in Bengal, tea in Assam, sugarcane in the United Provinces (now Uttar Pradesh), wheat in Punjab, cotton in

Maharashtra and Punjab, rice in Madras.

### Why the demand for Indian indigo?

The indigo plant grows primarily in the tropics. By the thirteenth century Indian indigo was being used by cloth manufacturers in Italy, France and Britain to dye cloth. However, only small amounts of Indian indigo reached the European market and its price was very high. European cloth manufacturers therefore had to depend on another plant called woad to make violet and blue dyes. Being a plant of the temperate zones, woad was more easily available in Europe. It was grown in northern Italy, southern France and in parts of Germany and Britain. Worried by the competition from indigo, woad producers in Europe pressurised their governments to ban the import of indigo. Cloth dyers, however, preferred indigo as a dye. Indigo produced a rich blue colour, whereas the dye from woad was pale and dull. By the seventeenth century, European cloth producers persuaded their governments to relax the ban on indigo import. The French began cultivating indigo in St Domingue in the Caribbean islands, the Portuguese in Brazil, the English in Jamaica, and the Spanish in Venezuela. Indigo **plantations** also came up in many parts of North America. By the end of the eighteenth century, the demand for Indian indigo grew further. Britain began to industrialise, and its cotton production expanded dramatically, creating an enormous new demand for cloth dyes. While the demand for indigo increased, its existing supplies from the West Indies and America collapsed for a variety of reasons. Between 1783 and 1789 the production of indigo in the world fell by half. Cloth dyers in Britain now desperately looked for new sources of indigo supply.

*In the eighteenth century, French planters produced indigo and sugar in the French colony of St Domingue in the Caribbean islands. The African **slaves** who worked on the plantations rose in rebellion in 1791, burning the plantations and killing their rich planters. In 1792 France abolished slavery in the French colonies. These events led to the collapse of the indigo plantations on the Caribbean islands.*

### Britain turns to India

Faced with the rising demand for indigo in Europe, the Company in India looked for ways to expand the area under indigo cultivation.

From the last decades of the eighteenth century indigo cultivation in Bengal expanded rapidly and Bengal indigo came to dominate the world market. In 1788 only about 30 per cent of the indigo imported into Britain was from India. By 1810, the proportion had gone up to 95 per cent.

As the indigo trade grew, commercial agents and officials of the Company began investing in indigo production. Over the years many Company officials left their jobs to look after their indigo business. Attracted by the prospect of high profits, numerous Scotsmen and Englishmen came to India and became planters. Those who had no money to produce indigo could get loans from the Company and the banks that were coming up at the time.

### How was indigo cultivated?

There were two main systems of indigo cultivation – nij and ryoti. Within the system of nij cultivation, the planter produced indigo in lands that he directly controlled. He either bought the land or rented it from other zamindars and produced indigo by directly employing hired labourers.

### The problem with nij cultivation

The planters found it difficult to expand the area under nij cultivation. Indigo could be cultivated only on fertile lands, and these were all already densely populated. Only small plots scattered over the landscape could be acquired. Planters needed large areas in compact blocks to cultivate indigo in plantations. Where could they get such land from? They attempted to lease in the land around the indigo factory, and evict the peasants from the area. But this always led to conflicts and tension. Nor was labour easy to mobilise. A large plantation required a vast number of hands to operate. And labour was needed precisely at a time when peasants were usually busy with their rice cultivation. Nij cultivation on a large scale also required many ploughs and bullocks. Investing on purchase and maintenance of ploughs was a big problem. Nor could supplies be easily got from the peasants since their ploughs and bullocks were busy on their rice fields, again exactly at the time that the indigo planters needed them.

Till the late nineteenth century, planters were therefore reluctant to expand the area under nij cultivation. Less than 25 per cent of the land producing indigo was under this system. The rest was under an alternative mode of cultivation – the ryoti system.

### Indigo on the land of ryots

Under the ryoti system, the planters forced the ryots to sign a contract, an agreement (*satta*). At times they pressurised the village headmen to sign the contract on behalf of the ryots. Those who signed the contract got cash advances from the planters at low rates of interest to produce indigo. But the loan committed the ryot to cultivating indigo on at least 25 per cent of the area under his holding. The planter provided the seed and the drill, while the cultivators prepared the soil, sowed the seed and looked after the crop.

The indigo villages were usually around indigo factories owned by planters. When the crop was delivered to the planter after the harvest, a new loan was given to the ryot, and the cycle started all over again. Peasants who were initially tempted by the loans soon realised how harsh the system was. The price they got for the indigo they produced was very low and the cycle of loans never ended.

There were other problems too. The planters usually insisted that indigo be cultivated on the best soils in which peasants preferred to cultivate rice. Indigo, moreover, had deep roots and it exhausted the soil rapidly. After an indigo harvest the land could not be sown with rice.

### The “Blue Rebellion” and After

In March 1859 thousands of ryots in Bengal refused to grow indigo. As the rebellion spread, ryots refused to pay rents to the planters, and attacked indigo factories armed with swords and spears, bows and arrows. Those who worked for the planters were socially boycotted, and the gomasthas – agents of planters – who came to collect rent were beaten up. Ryots swore they would no longer take advances to sow indigo nor be bullied by the planters’ lathiyals – the lathi-wielding strongmen maintained by the planters.

In 1859, the indigo ryots felt that they had the support of the local zamindars and village headmen in their rebellion against the planters. In many villages, headmen who had been forced to sign indigo contracts, mobilised the indigo peasants and fought pitched battles with the lathiyals. In other places even the zamindars

went around villages urging the ryots to resist the planters. These zamindars were unhappy with the increasing power of the planters and angry at being forced by the planters to give them land on long leases. The indigo peasants also imagined that the British government would support them in their struggle against the planters. After the Revolt of 1857 the British government was particularly worried about the possibility of another popular rebellion. When the news spread of a simmering revolt in the indigo districts, the Lieutenant Governor toured the region in the winter of 1859. The ryots saw the tour as a sign of government sympathy for their plight.

Worried by the rebellion, the government brought in the military to protect the planters from assault, and set up the Indigo Commission to enquire into the system of indigo production. The Commission held the planters guilty, and criticised them for the coercive methods they used with indigo cultivators. It declared that indigo production was not profitable for ryots. The Commission asked the ryots to fulfil their existing contracts but also told them that they could refuse to produce indigo in future.

After the revolt, indigo production collapsed in Bengal. But the planters now shifted their operation to Bihar. With the discovery of synthetic dyes in the late nineteenth century their business was severely affected, but yet they managed to expand production. When Mahatma Gandhi returned from South Africa, a peasant from Bihar persuaded him to visit Champaran and see the plight of the indigo cultivators there. Mahatma Gandhi’s visit in 1917 marked the beginning of the Champaran movement against the indigo planters.

**Important Terms:** **Diwan:** Person related to the department of revenue during medieval and early British period. He was the head of the revenue department. **Permanent settlement:** Land revenue settlement imposed by Lord Cornwallis in Bengal province, wherein the land revenue was settled permanently and taluqdars and rajas were regarded as the owners of the land and were held responsible for the collection of land revenue. **Ryotwari:** Land revenue settlement in which peasants were held responsible for the deposition of land revenue in the treasury. Peasants were declared as the landowners of the land. **Gomasthas:** Indians who worked as agents for the Indigo planters. **Bigha:** Bigha was a unit of measurement of land prior to British rule in India. It was not uniform. Two ploughs were required to cultivate one bigha. Britishers standardised the measurement in the province of Bengal. **Countryside:** It refers to rural areas. **Mahal:** In British records of revenue, mahal denotes a revenue state which may be a village or a group of villages. **Mahalwari System:** This was a system under which the rates of land revenue were not fixed, rather they were revised periodically. **Ryoti:** The cultivator. **Indigo:** A plant which produces rich blue colour. **Wood:** A plant which produces blue and violet dyes. **Slave:** A person who is owned by another person. A slave has to work as per the discretion of his master and has no freedom of his own. **Satta:** An agreement or a contract. **Lathiyals:** The strongmen wielding lathis, kept by the planters. **Vat:** A storage or fermenting vessel.

**Important Dates:** **12th August 1765:** The Mughal Emperor appointed EIC as the Diwan of Bengal. **1770:** A terrible famine struck Bengal. **1786-1793:** Lord Cornwallis was the Governor General of India. **1792-1827:** Ryotwari System (Ryot System) introduced in the presidencies of Madras and Bombay. **1793:** Lord Cornwallis introduced “Permanent Settlement”. **1819-1826:** Thomas Munro was the Governor General of Madras. **1822:** Mahalwari System was introduced. **1859:** Revolt of the indigo cultivators



## Golden Age

**Introduction:** Colonial rule had affected each and every class of the people, be it rulers, nobles, common people, peasants and artisans or tribals. Let us explore the effects of colonialism on the tribal communities of India.

What problems did tribals face? Who were the outsiders being referred to as dikus, and how did they enslave the people of the region? What was happening to the tribal people under the British? How did their lives change? These are some of the questions you will read about in this chapter.

Most tribes had customs and rituals that were very different from those laid down by Brahmins. These societies also did not have the sharp social divisions that were characteristic of caste societies. All those who belonged to the same tribe thought of themselves as sharing common ties of kinship. However, this did not mean that there were no social and economic differences within tribes.

### How Did Tribal Groups Live?

By the nineteenth century, tribal people in different parts of India were involved in a variety of activities.

### Categories of tribal people

Various categories of tribal people are:

- (i) *Jhum*/Shifting cultivators who lived in North East and Central India.
- (ii) The hunters and gatherers known as Khonds, who lived in forests of Orissa.
- (iii) The pastoralists who moved along with their herds of cattle or sheep according to seasons. *Example:*
  - (a) The Van Gujjars of the Punjab hills and Labadis of Andhra Pradesh were cattle herders, the Gaddis of Kullu were shepherds and Bakarwals of Kashmir herded goats.
  - (b) Settled cultivators such as the Munda of Chhotanagpur, Gonds and Santhals.

### How Did Colonial Rule Affect Tribal Lives?

The lives of tribal groups changed during British rule. Let us see what these changes were.



### – Location of some tribal groups in India

#### Problems faced by tribals during British rule?

(i) Before British rule, tribal people had tribal chiefs who were important and had certain amount of economic power and had their own police as well as rules at some places, but they lost considerable powers when Britishers arrived.

(ii) Britishers wanted that moving tribal groups should settle down and become peasant cultivators as settled tribes were easier to control.

(iii) The Britishers tried to settle down *Jhum* cultivators but they were unsuccessful.

(iv) Some forest areas were declared as reserved forests which would provide timber to Britishers.

(v) During the nineteenth century, tribal groups found that traders and money-lenders were coming into the forests more often, wanting to buy forest produce, offering cash loans, and asking them to work for wages. They wanted to buy forest products at very cheap prices which caused problem.

(vi) Britishers declared the forest as a state property.

#### Forest laws and their impact

The life of tribal groups, as you have seen, was directly connected to the forest. So changes in forest laws had a considerable effect on tribal lives. The British extended their control over all forests and declared that forests were state property. Some forests were classified as Reserved Forests for they produced timber which the British wanted. In these forests people were not allowed to move freely, practise *jhum* cultivation, collect fruits, or hunt animals. How were *jhum* cultivators to survive in such a situation? Many were therefore forced to move to other areas in search of work and livelihood. But once the British stopped the tribal people from living inside forests, they faced a problem. From where would the Forest Department get its labour to cut trees for railway sleepers and to transport logs?

Colonial officials came up with a solution. They decided that they would give *jhum* cultivators small patches of land in the forests and allow them to cultivate these on the condition that those who lived in the villages would have to provide labour to the Forest Department and look after the forests. So in many regions the Forest Department established forest villages to ensure a regular supply of cheap labour.

Many tribal groups reacted against the colonial forest laws. They disobeyed the new rules, continued with practices that were declared illegal, and at times rose in open rebellion. Such was the revolt of Songram Sangma in 1906 in Assam, and the forest satyagraha of the 1930s in the Central Provinces.

Through the nineteenth and twentieth centuries, tribal groups in different parts of the country rebelled against the changes in laws, the restrictions on their practices, the new taxes they had to pay, and the exploitation by traders and moneylenders. The Kols rebelled in 1831-32, Santhals rose in revolt in 1855, the Bastar Rebellion in central India broke out in 1910 and the Warli Revolt in Maharashtra in 1940. The movement that Birsa led was one such movement.

**Important Terms:** **Dikus:** Dikus were the outsiders who visited Munda lands. These people included British officials, Hindu landlords, moneylenders and traders. **Jhum:** *Jhum* was a cultivation practice adopted or practised by the tribals. In this type of agriculture, a patch of land was selected for cultivation and scrubs were burned to clear the land to raise crops for 2 to 3 years. **Fallow:** Land which is left uncultivated for some time so that the soil regains its fertility. **Mahua:** An edible flower used to make alcohol. **Bewar:** A term used for shifting

cultivation in Madhya Pradesh. **Sleeper:** Horizontal planks of wood used to lay railway lines. **Akhara:** Wrestling ground. **Vaishnav:** Those who worship Lord Vishnu. **Satyug:** The Age of truth. **Sirdars:** The chiefs/leaders. **Sal:** A type of tree. **Important Dates:** 1831-32: The Kols revolted against the forest laws of the Britishers. 1855: Santhals rebelled against the colonial rule. **Mid 1870s:** Birsa Munda was born. 1871: The Britishers passed the Criminal Tribes Act. 1895: Birsa Munda was arrested. 1897: Birsa Munda was released. 1900: Birsa Munda died. 1906: Songram Sangma rebelled in Assam. 1910: The Bastar rebellion broke out in central India. 1930s: The forest satyagraha took place in Central Provinces. 1940: Warli Revolt in Maharashtra. **Major Tribal Movements in India (1818 to 1919):** **Tribe Year** Bhils 1818-48Kolis 1824-48Khasis 1829-32Kols 1831-32Khonds 1846-48 and 1855Santhals 1855-1856Naikada 1858-59 and 1868Mundas 1899-1900Bastars 1910Bhils 1913Oraons 1914-15Kukis 1917-19

## Chapter 5 When People Rebel 1857 And After

### Policies and the People

In the previous chapters you looked at the policies of the East India Company and the effect they had on different people. Kings, queens, peasants, landlords, tribals, soldiers were all affected in different ways. You have also seen how people resist policies and actions that harm their interests or go against their sentiments.

### Nawabs lose their power

Since the mid-eighteenth century, nawabs and rajas had seen their power erode. They had gradually lost their authority and honour. Residents had been stationed in many courts, the freedom of the rulers reduced, their armed forces disbanded, and their revenues and territories taken away by stages.

Many ruling families tried to negotiate with the Company to protect their interests. For example, Rani Lakshmibai of Jhansi wanted the Company to recognise her adopted son as the heir to the kingdom after the death of her husband. Nana Saheb, the adopted son of Peshwa Baji Rao II, pleaded that he be given his father's pension when the latter died. However, the Company, confident of its superiority and military powers, turned down these pleas.

Awadh was one of the last territories to be annexed. In 1801, a subsidiary alliance was imposed on Awadh, and in 1856 it was taken over. Governor-General Dalhousie declared that the territory was being misgoverned and British rule was needed to ensure proper administration. The Company even began to plan how to bring the Mughal dynasty to an end. The name of the Mughal king was removed from the coins minted by the Company. In 1849, Governor-General Dalhousie announced that after the death of Bahadur Shah Zafar, the family of the king would be shifted out of the Red Fort and given another place in Delhi to reside in. In 1856, Governor-General Canning decided that Bahadur Shah Zafar would be the last Mughal king and after his death none of his descendants would be recognised as kings – they would just be called princes.

### The peasants and the sepoys

In the countryside peasants and zamindars resented the high taxes and the rigid methods of revenue collection. Many failed to pay back their loans to the moneylenders and gradually lost the lands they had tilled for generations.

The Indian sepoys in the employ of the Company also had reasons for discontent. They were unhappy about their pay, allowances and conditions of service. Some of the new rules, moreover, violated their religious

sensibilities and beliefs. Did you know that in those days many people in the country believed that if they crossed the sea they would lose their religion and caste? So when in 1824 the sepoys were told to go to Burma by the sea route to fight for the Company, they refused to follow the order, though they agreed to go by the land route. They were severely punished, and since the issue did not die down, in 1856 the Company passed a new law which stated that every new person who took up employment in the Company's army had to agree to serve overseas if required.

Sepoys also reacted to what was happening in the countryside. Many of them were peasants and had families living in the villages. So the anger of the peasants quickly spread among the sepoys.

### Responses to reforms

The British believed that Indian society had to be reformed. Laws were passed to stop the practice of sati and to encourage the remarriage of widows. English-language education was actively promoted. After 1830, the Company allowed Christian missionaries to function freely in its domain and even own land and property. In 1850, a new law was passed to make conversion to Christianity easier. This law allowed an Indian who had converted to Christianity to inherit the property of his ancestors. Many Indians began to feel that the British were destroying their religion, their social customs and their traditional way of life.

### A Mutiny Becomes a Popular Rebellion

A very large number of people begin to believe that they have a common enemy and rise up against the enemy at the same time. For such a situation to develop people have to organise, communicate, take initiative and display the confidence to turn the situation around. Such a situation developed in the northern parts of India in 1857. After a hundred years of conquest and administration, the English East India Company faced a massive rebellion that started in May 1857 and threatened the Company's very presence in India. Sepoys mutinied in several places beginning from Meerut and a large number of people from different sections of society rose up in rebellion. Some regard it as the biggest armed resistance to colonialism in the nineteenth century anywhere in the world.

### From Meerut to Delhi

- (i) On 29 March 1857, a young soldier, Mangal Pandey, was hanged to death for attacking his officers in Barrackpore.
- (ii) Few days later, some sepoys of the regiment at Meerut refused to do the army drill using the new cartridges, which were suspected of being coated with the fat of cows and pigs.
- (iii) As a result, eighty-five sepoys were dismissed from service and sentenced to jail for years for disobeying their officers. This happened on 9<sup>th</sup> May 1857.
- (iv) On 10<sup>th</sup> May, the other soldiers marched to the jail in Meerut and released the imprisoned sepoys.
- (v) British officers were killed, arms and ammunition were seized and the buildings were set on fire.
- (vi) Triumphant soldiers gathered around the walls of the Red Fort where the Badshah lived, demanding to meet him. The soldiers themselves proclaimed Bahadur Shah Zafar as their leader, which he had to accept. The ageing emperor had to accept this demand. He wrote letters to all the chiefs and rulers of the country to come forward and organise a confederacy of Indian states to fight the British. This single step taken by

Bahadur Shah had great implications.

The Mughal dynasty had ruled over a very large part of the country. Most smaller rulers and chieftains controlled different territories on behalf of the Mughal ruler. Threatened by the expansion of British rule, many of them felt that if the Mughal emperor could rule again, they too would be able to rule their own territories once more, under Mughal authority.

The British had not expected this to happen. They thought the disturbance caused by the issue of the cartridges would die down. But Bahadur Shah Zafar's decision to bless the rebellion changed the entire situation dramatically. Often when people see an alternative possibility they feel inspired and enthused. It gives them the courage, hope and confidence to act.

### **The rebellion spreads**

After the British were routed from Delhi, there was no uprising for almost a week. It took that much time for news to travel. Then, a spurt of mutinies began. Regiment after regiment mutinied and took off to join other troops at nodal points like Delhi, Kanpur and Lucknow. After them, the people of the towns and villages also rose up in rebellion and rallied around local leaders, zamindars and chiefs who were prepared to establish their authority and fight the British. Nana Saheb, the adopted son of the late Peshwa Baji Rao who lived near Kanpur, gathered armed forces and expelled the British garrison from the city. He proclaimed himself Peshwa. He declared that he was a governor under Emperor Bahadur Shah Zafar. In Lucknow, Birjis Qadr, the son of the deposed Nawab Wajid Ali Shah, was proclaimed the new Nawab. He too acknowledged the suzerainty of Bahadur Shah Zafar. His mother Begum Hazrat Mahal took an active part in organising the uprising against the British. In Jhansi, Rani Lakshmibai joined the rebel sepoys and fought the British along with Tantia Tope, the general of Nana Saheb. In the Mandla region of Madhya Pradesh, Rani Avantibai Lodhi of Ramgarh raised and led an army of four thousand against the British who had taken over the administration of her state.

The British were greatly outnumbered by the rebel forces. They were defeated in a number of battles. This convinced the people that the rule of the British had collapsed for good and gave them the confidence to take the plunge and join the rebellion. A situation of widespread popular rebellion developed in the region of Awadh in particular. On 6 August 1857, we find a telegram sent by Lieutenant Colonel Tytler to his Commander-in-Chief expressing the fear felt by the British: "Our men are cowed by the numbers opposed to them and the endless fighting. Every village is held against us, the zamindars have risen to oppose us." Many new leaders came up. For example, Ahmadullah Shah, a Maulvi from Faizabad, prophesied that the rule of the British would come to an end soon. He caught the imagination of the people and raised a huge force of supporters. He came to Lucknow to fight the British. In Delhi, a large number of Ghazis or religious warriors came together to wipe out the white people. Bakht Khan, a soldier from Bareilly, took charge of a large force of fighters who came to Delhi. He became a key military leader of the rebellion. In Bihar, an old zamindar, Kunwar Singh, joined the rebel sepoys and battled with the British for many months. Leaders and fighters from across the land joined the fight.

### **The Company Fights Back**

Unnerved by the scale of the upheaval, the Company

decided to repress the revolt with all its might. It brought reinforcements from England, passed new laws so that the rebels could be convicted with ease, and then moved into the storm centres of the revolt. Delhi was recaptured from the rebel forces in September 1857. The last Mughal emperor, Bahadur Shah Zafar was tried in court and sentenced to life imprisonment. He and his wife Begum Zinat Mahal were sent to prison in Rangoon in October 1858. Bahadur Shah Zafar died in the Rangoon jail in November 1862.

The recapture of Delhi, however, did not mean that the rebellion died down after that. People continued to resist and battle the British. The British had to fight for two years to suppress the massive forces of popular rebellion.

Lucknow was taken in March 1858. Rani Lakshmibai was defeated and killed in June 1858. A similar fate awaited Rani Avantibai, who after initial victory in Kheri, chose to embrace death when surrounded by the British on all sides. Tantia Tope escaped to the jungles of central India and continued to fight a guerrilla war with the support of many tribal and peasant leaders. He was captured, tried and killed in April 1859.

Just as victories against the British had earlier encouraged rebellion, the defeat of rebel forces encouraged desertions. The British also tried their best to win back the loyalty of the people. They announced rewards for loyal landholders would be allowed to continue to enjoy traditional rights over their lands. Those who had rebelled were told that if they submitted to the British, and if they had not killed any white people, they would remain safe and their rights and claims to land would not be denied. Nevertheless, hundreds of sepoys, rebels, nawabs and rajas were tried and hanged.

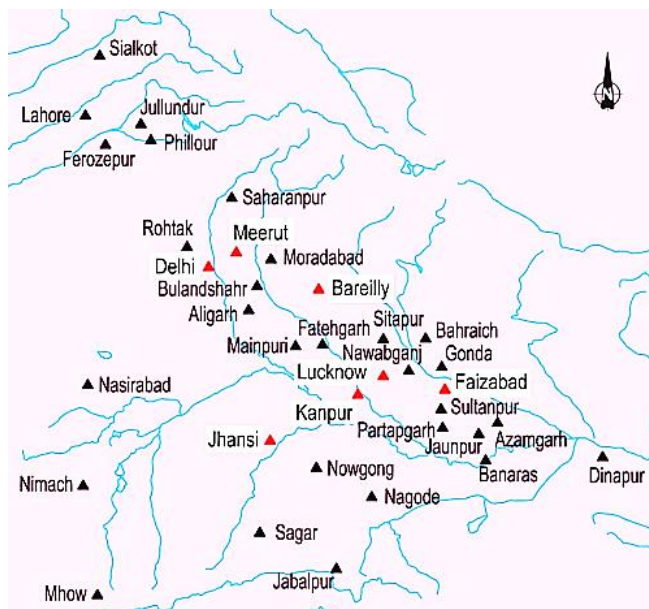
### **Aftermath**

The British had regained control of the country by the end of 1859, but they could not carry on ruling the land with the same policies any more.

### **Given below are the important changes that were introduced by the British.**

1. The British Parliament passed a new Act in 1858 and transferred the powers of the East India Company to the British Crown in order to ensure a more responsible management of Indian affairs. A member of the British Cabinet was appointed Secretary of State for India and made responsible for all matters related to the governance of India. He was given a council to advise him, called the India Council. The Governor-General of India was given the title of Viceroy, that is, a personal representative of the Crown. Through these measures the British government accepted direct responsibility for ruling India.
2. All ruling chiefs of the country were assured that their territory would never be annexed in future. They were allowed to pass on their kingdoms to their heirs, including adopted sons. However, they were made to acknowledge the British Queen as their Sovereign Paramount. Thus the Indian rulers were to hold their kingdoms as subordinates of the British Crown.





– Some important centres of the Revolt in North India

3. It was decided that the proportion of Indian soldiers in the army would be reduced and the number of European soldiers would be increased. It was also decided that instead of recruiting soldiers from Awadh, Bihar, central India and south India, more soldiers would be recruited from among the Gurkhas, Sikhs and Pathans.

4. The land and property of Muslims was confiscated on a large scale and they were treated with suspicion and hostility. The British believed that they were responsible for the rebellion in a big way.

5. The British decided to respect the customary religious and social practices of the people in India.

6. Policies were made to protect landlords and zamindars and give them security of rights over their lands.

Thus a new phase of history began after 1857.

#### ELSEWHERE

##### For a Heavenly Kingdom of Great Peace

While the revolt was spreading in India in 1857, a massive popular uprising was raging in the southern parts of China. It had started in 1850 and could be suppressed only by the mid-1860s. Thousands of labouring, poor people were led by Hong Xiuquan to fight for the establishment of the Heavenly Kingdom of Great Peace. This was known as the Taiping Rebellion. Hong Xiuquan was a convert to Christianity and was against the traditional religions practised in China such as Confucianism and Buddhism. The rebels of Taiping wanted to establish a kingdom where a form of Christianity was practised, where no one held any private property, where there was no difference between social classes and between men and women, where consumption of opium, tobacco, alcohol, and activities like gambling, prostitution, slavery, were prohibited.

The British and French armed forces operating in China helped the emperor of the Qing dynasty to put down the Taiping Rebellion.

**Important Terms:** **Firangi:** Term used for foreigners as contempt. **Suzerainty:** The domain or area subject to a suzerain/ruler. **Cartridges:** A casing fitted with a bullet. **Mutiny:** Revolt or rebellion against constituted authority, especially by sailors and armed personals against their officers. **Sati:** A rite to be performed by the Hindu women on the death of her husband. The widow used to burn herself on the funeral pyre of her husband. **Sepoy:** An Indian soldier during colonial

rule. **Ghazis:** An Arabic term which refers to a person who participates in military expeditions. **Paramount:** Supreme; more important than any other thing or person.

**Important Dates:** **1849:** Announcement made by Lord Dalhousie that after the death of Bahadur Shah Zafar, the king's family would be shifted out of the Red Fort and settled at some other place in Delhi. **1850:** A new law was passed which made conversion into Christianity easier. **1856:** Governor General Canning decided that Bahadur Shah Zafar would be the last Indian king and after his death, his descendants would be recognized as mere princes and not the kings; The Company passed a new law which stated that every person who agreed to be employed in the Company's army would have to serve overseas, if required. **29th March, 1857:** Mangal Pandey, an Indian soldier, was hanged for attacking British officials in Barrackpore. **May, 1857:** Sepoys revolted at several places. **10th May, 1857:** Sepoys moved towards Delhi from Meerut. **September, 1857:** Delhi was reoccupied from the revolutionaries. **October, 1858:** Mughal Emperor Bahadur Shah Zafar was imprisoned in Rangoon jail along with his wife. **1858:** Powers of the East India Company were transferred to the British Crown through a new Act passed by the British Parliament. **November, 1862:** Bahadur Shah Zafar died while in Rangoon jail.

## Chapter 6 Colonialism And The City - The Story Of An Imperial Capital

Urbanisation means the migration of rural folk towards the towns and cities. The history of urbanization can be traced back to the Indus Valley Civilization.

#### What Happened to Cities Under Colonial Rule?

In most parts of the Western world modern cities emerged with industrialisation. In Britain, industrial cities like Leeds and Manchester grew rapidly in the nineteenth and twentieth centuries, as more and more people sought jobs, housing and other facilities in these places. However, unlike Western Europe, Indian cities did not expand as rapidly in the nineteenth century.

Why was this so?

*Machlipatnam developed as an important port town in the seventeenth century. Its importance declined by the late eighteenth century as trade shifted to the new British ports of Bombay, Madras and Calcutta.*

In the late eighteenth century, Calcutta, Bombay and Madras rose in importance as **Presidency** cities. They became the centres of British power in the different regions of India. At the same time, a host of smaller cities declined. Many towns manufacturing specialised goods declined due to a drop in the demand for what they produced. Old trading centres and ports could not survive when the flow of trade moved to new centres. Similarly, earlier centres of regional power collapsed when local rulers were defeated by the British and new centres of administration emerged. This process is often described as **de-urbanisation**. Cities such as Machlipatnam, Surat and Seringapatam were de-urbanised during the nineteenth century. By the early twentieth century, only 11 per cent of Indians were living in cities.

De-urbanisation took place as a result of British economic policies. The old manufacturing towns of India such as Dacca, Murshidabad, Surat, etc. lost their glory.

- Delhi became the hub of political parties.
- Manufacturing buildings were built by the British in Delhi.
- The period from 1830 to 1857 is referred to as period of Delhi Renaissance.
- The British wanted Delhi to forget its Mughal past and

got the area around the forts cleared off, gardens and mosques for security reasons.

- New Delhi was constructed as a 10-square mile city on Raisina Hill.
- Two architects Edward Lutyens and Herbert Baker designed New Delhi and its buildings.
- The British wanted New Delhi to represent a sense of law and order unlike the chaos of old Delhi.
- The British considered overcrowded places as unhealthy and unhygienic and thus wanted a new city that had better water supply, sewage disposal and drainage facilities than the old city.

**Important Terms: Presidency:** Colonial India was divided into three presidencies of Bombay, Madras and Calcutta to facilitate administration. **Dargah:** This refers to the tomb of a Sufi saint. **Khanqah:** A Sufi lodge used as a rest house for travellers; a place where people can hold discussions on religious matters, interact with the saints and hear Sufi music. **Idgah:** A place of performing prayers by the Muslims. **Cul-de-sac:** A street with a dead end. **Baolis:** Step wells, in which water can be reached by descending several steps. **Haveli:** Traditional mansions in India having architectural and historical importance. **Amir:** Feudal during the Mughal period. **Renaissance:** Revival of art and learning; A term used to denote a period of great creative activity. **Important Dates: 1639:** The capital of Shahjahanabad was built by Shah Jahan. **1792:** Establishment of Delhi College. **1830-57:** The period of Delhi renaissance. **1877:** Viceroy Lytton initiated a durbar to acknowledge Queen Victoria as the Empress of India. **1888:** Lahore Gate Improvement Scheme planned by Robert Clarke as an extension scheme for the walled city residents. **1911:** Delhi was made the new capital of India, replacing Calcutta. **1936:** Establishment of Delhi Improvement Trust.

## Chapter 7 Weavers, Iron Smelters And Factory Owners

This chapter tells the story of the crafts and industries of India during British rule by focusing on two industries, namely, textiles and iron and steel. Both these industries were crucial for the industrial revolution in the modern world. Mechanised production of cotton textiles made Britain the foremost industrial nation in the nineteenth century. And when its iron and steel industry started growing from the 1850s, Britain came to be known as the “workshop of the world”.

The industrialisation of Britain had a close connection with the conquest and colonisation of India. You have seen how the English East India Company's interest in trade led to occupation of territory, and how the pattern of trade changed over the decades. In the late eighteenth century the Company was buying goods in India and exporting them to England and Europe, making profit through this sale. With the growth of industrial production, British industrialists began to see India as a vast market for their industrial products, and over time manufactured goods from Britain began flooding India. How did this affect Indian crafts and industries? This is the question we will explore in this chapter.

### Indian Textiles and the World Market

Let us first look at textile production. Around 1750, before the British conquered Bengal, India was by far the world's largest producer of cotton textiles. Indian textiles had long been renowned both for their fine quality and exquisite craftsmanship. They were extensively traded in Southeast Asia (Java, Sumatra and

Penang) and West and Central Asia. From the sixteenth century European trading companies began buying Indian textiles for sale in Europe. Memories of this flourishing trade and the craftsmanship of Indian weavers is preserved in many words still current in English and other languages. It is interesting to trace the origin of such words, and see what they tell us.

### Words tell us histories

European traders first encountered fine cotton cloth from India carried by Arab merchants in Mosul in present-day Iraq. So they began referring to all finely woven textiles as “muslin” – a word that acquired wide currency. When the Portuguese first came to India in search of spices they landed in Calicut on the Kerala coast in south-west India. The cotton textiles which they took back to Europe, along with the spices, came to be called “calico” (derived from Calicut), and subsequently calico became the general name for all cotton textiles. Other printed cotton cloths in bulk were called chintz, cossas (or khassa) and bandanna.

***Patola** a type of cloth was woven in Surat, Ahmedabad and Patan. Highly valued in Indonesia, it became part of the local weaving tradition there.*

***Jamdani** is a fine muslin on which decorative motifs are woven on the loom, typically in grey and white. Often a mixture of cotton and gold thread was used, as in the cloth in this picture. The most important centres of jamdani weaving were Dacca in Bengal and Lucknow in the United Provinces.*

***Bandanna** now refers to any brightly coloured and printed scarf for the neck or head. Originally, the term derived from the word “bandhna” (Hindi for tying), and referred to a variety of brightly coloured cloth produced through a method of tying and dying. Bandanna design, early twentieth century- In this odhni, two tie-and-dye silk pieces are seamed together with gold thread embroidery. Bandanna patterns were mostly produced in Rajasthan and Gujarat.*

***Chintz**- This word is derived from the Hindi word ‘chhint’, which is a type of cloth with small and colourful flowery designs. It was produced in Masulipatnam, Andhra Pradesh, mid-nineteenth century*

### Indian textiles in European markets

By the early eighteenth century, worried by the popularity of Indian textiles, wool and silk makers in England began protesting against the import of Indian cotton textiles. In 1720, the British government enacted a legislation banning the use of printed cotton textiles – chintz – in England. Interestingly, this Act was known as the Calico Act.

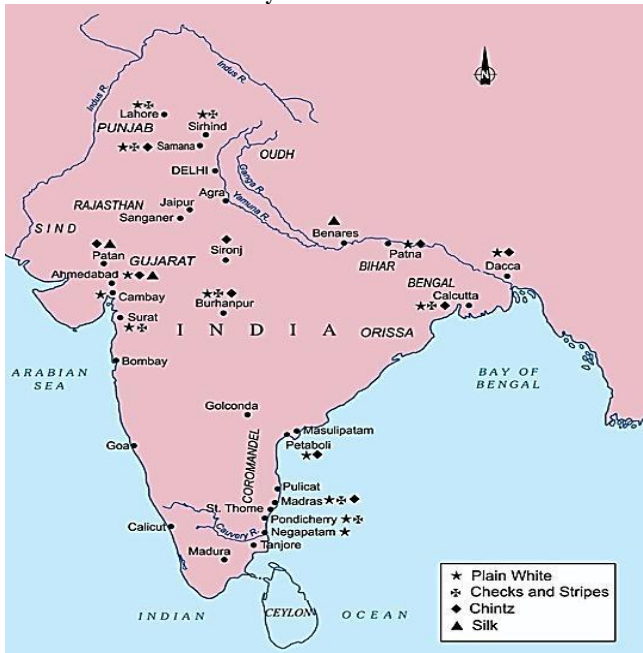
At this time textile industries had just begun to develop in England. Unable to compete with Indian textiles, English producers wanted a secure market within the country by preventing the entry of Indian textiles. The first to grow under government protection was the calico printing industry. Indian designs were now imitated and printed in England on white muslin or plain unbleached Indian cloth.

Competition with Indian textiles also led to a search for technological innovation in England. In 1764, the **spinning jenny** was invented by John Kaye which increased the productivity of the traditional spindles. The invention of the steam engine by Richard Arkwright in 1786 revolutionised cotton textile weaving. Cloth could now be woven in immense quantities and cheaply too.

However, Indian textiles continued to dominate world trade till the end of the eighteenth century. European



trading companies – the Dutch, the French and the English – made enormous profits out of this flourishing trade. These companies purchased cotton and silk textiles in India by importing silver. But as you know, when the English East India Company gained political power in Bengal, it no longer had to import precious metal to buy Indian goods. Instead, they collected revenues from peasants and zamindars in India, and used this revenue to buy Indian textiles.



#### – Weaving centres: 1500-1750

*As European trade expanded, trading settlements were established at various ports. The Dutch settlements in Cochin came up in the seventeenth century. Notice the fortification around the settlement.*

#### Where were the major centres of weaving in the late eighteenth century?

*If you look at the map you will notice that textile production was concentrated in four regions in the early nineteenth century. Bengal was one of the most important centres. Located along the numerous rivers in the delta, the production centres in Bengal could easily transport goods to distant places. Do not forget that in the early nineteenth century railways had not developed and roads were only just beginning to be laid on an extensive scale.*

*Dacca in Eastern Bengal (now Bangladesh) was the foremost textile centre in the eighteenth century. It was famous for its mulmul and jamdani weaving.*

*If you look at the southern part of India in the map you will see a second cluster of cotton weaving centres along the Coromandel coast stretching from Madras to northern Andhra Pradesh. On the western coast there were important weaving centres in Gujarat.*

#### Who were the weavers?

Weavers often belonged to communities that specialised in weaving. Their skills were passed on from one generation to the next. The tanti weavers of Bengal, the julahas or momin weavers of north India, sale and kaikollar and devangs of south India are some of the communities famous for weaving.

#### The decline of Indian textiles

The development of cotton industries in Britain affected textile producers in India in several ways. First: Indian textiles now had to compete with British textiles in the European and American markets. Second: exporting textiles to England also became increasingly difficult since very high duties were imposed on Indian textiles

imported into Britain.

By the beginning of the nineteenth century, English-made cotton textiles successfully ousted Indian goods from their traditional markets in Africa, America and Europe. Thousands of weavers in India were now thrown out of employment. Bengal weavers were the worst hit. English and European companies stopped buying Indian goods and their agents no longer gave out advances to weavers to secure supplies. Distressed weavers wrote petitions to the government to help them.

But worse was still to come. By the 1830s British cotton cloth flooded Indian markets. In fact, by the 1880s two-thirds of all the cotton clothes worn by Indians were made of cloth produced in Britain. This affected not only specialist weavers but also spinners. Thousands of rural women who made a living by spinning cotton thread were rendered jobless.

Handloom weaving did not completely die in India. You must have heard of Sholapur in western India and Madura in South India. These towns emerged as important new centres of weaving in the late nineteenth century. Later, during the national movement, Mahatma Gandhi urged people to boycott imported textiles and use hand-spun and hand-woven cloth. Khadi gradually became a symbol of nationalism. The charkha came to represent India, and it was put at the centre of the tricolour flag of the Indian National Congress adopted in 1931.

What happened to the weavers and spinners who lost their livelihood? Many weavers became agricultural labourers. Some migrated to cities in search of work, and yet others went out of the country to work in plantations in Africa and South America. Some of these handloom weavers also found work in the new cotton mills that were established in Bombay (now Mumbai), Ahmedabad, Sholapur, Nagpur and Kanpur.

#### Cotton mills come up

The first cotton mill in India was set up as a spinning mill in Bombay in 1854. From the early nineteenth century, Bombay had grown as an important port for the export of raw cotton from India to England and China. It was close to the vast black soil tract of western India where cotton was grown. When the cotton textile mills came up they could get supplies of raw material with ease. In the first few decades of its existence, the textile factory industry in India faced many problems. It found it difficult to compete with the cheap textiles imported from Britain. In most countries, governments supported industrialisation by imposing heavy duties on imports. This eliminated competition and protected infant industries. The colonial government in India usually refused such protection to local industries. The first major spurt in the development of cotton factory production in India, therefore, was during the First World War when textile imports from Britain declined and Indian factories were called upon to produce cloth for military supplies.

Indian Wootz steel fascinated European scientists.

Michael Faraday, the legendary scientist and discoverer of electricity and electromagnetism, spent four years studying the properties of Indian Wootz (1818-22).

However, the Wootz steel making process, which was so widely known in south India, was completely lost by the mid-nineteenth century. Can you guess why this was so? The swords and armour making industry died with the conquest of India by the British and imports of iron and steel from England displaced the iron and steel produced by craftspeople in India.



### Abandoned furnaces in villages

Production of Wootz steel required a highly specialised technique of refining iron. But iron smelting in India was extremely common till the end of the nineteenth century. In Bihar and Central India, in particular, every district had smelters that used local deposits of ore to produce iron which was widely used for the manufacture of implements and tools of daily use. The furnaces were most often built of clay and sun-dried bricks. The smelting was done by men while women worked the bellows, pumping air that kept the charcoal burning.

*Some communities like the Agarias specialised in the craft of iron smelting. In the late nineteenth century a series of famines devastated the dry tracts of India. In Central India, many of the Agaria iron smelters stopped work, deserted their villages and migrated, looking for some other work to survive the hard times. A large number of them never worked their furnaces again.*

By the late nineteenth century, however, the craft of iron smelting was in decline. In most villages, furnaces fell into disuse and the amount of iron produced came down. Why was this so?

One reason was the new forest laws that you have read about. When the colonial government prevented people from entering the reserved forests, how could the iron smelters find wood for charcoal? Where could they get iron ore? Defying forest laws, they often entered the forests secretly and collected wood, but they could not sustain their occupation on this basis for long. Many gave up their craft and looked for other means of livelihood.

In some areas the government did grant access to the forest. But the iron smelters had to pay a very high tax to the forest department for every furnace they used. This reduced their income.

Moreover, by the late nineteenth century iron and steel was being imported from Britain. Ironsmiths in India began using the imported iron to manufacture utensils and implements. This inevitably lowered the demand for iron produced by local smelters.

By the early twentieth century, the artisans producing iron and steel faced a new competition.

### Iron and steel factories come up in India

The Tata Iron and Steel Company (TISCO) that came up began producing steel in 1912. TISCO was set up at an opportune time. All through the late nineteenth century, India was importing steel that was manufactured in Britain. Expansion of the railways in India had provided a huge market for rails that Britain produced. For a long while, British experts in the Indian Railways were unwilling to believe that good quality steel could be produced in India.

By the time TISCO was set up the situation was changing. In 1914 the First World War broke out. Steel produced in Britain now had to meet the demands of war in Europe. So imports of British steel into India declined dramatically and the Indian Railways turned to TISCO for supply of rails. As the war dragged on for several years, TISCO had to produce shells and carriage wheels for the war. By 1919 the colonial government was buying 90 per cent of the steel manufactured by TISCO. Over time TISCO became the biggest steel industry within the British empire.

In the case of iron and steel, as in the case of cotton textiles, industrial expansion occurred only when British imports into India declined and the market for Indian industrial goods increased. This happened during the First World War and after. As the nationalist

movement developed and the industrial class became stronger, the demand for government protection became louder. Struggling to retain its control over India, the British government had to concede many of these demands in the last decades of colonial rule.

*To meet the demands of the war, TISCO had to expand its capacity and extend the size of its factory. The programme of expansion continued after the war. Here you see new powerhouses and boiler houses being built in Jamshedpur in 1919.*

### ELSEWHERE

#### Early years of industrialisation in Japan

The history of industrialisation of Japan in the late nineteenth century presents a contrast to that of India. The colonial state in India, keen to expand the market for British goods, was unwilling to support Indian industrialists. In Japan, the state encouraged the growth of industries.

The Meiji regime, which assumed power in Japan in 1868, believed that Japan needed to industrialise in order to resist Western domination. So it initiated a series of measures to help industrialisation. Postal services, telegraph, railways, steam powered shipping were developed. The most advanced technology from the West was imported and adapted to the needs of Japan. Foreign experts were brought to train Japanese professionals. Industrialists were provided with generous loans for investment by banks set up the government. Large industries were first started by the government and then sold off at cheap rates to business families.

In India colonial domination created barriers to industrialisation. In Japan the fear of foreign conquest spurred industrialisation. But this also meant that the Japanese industrial development from the beginning was linked to military needs.

**Important Terms:** **Muslin:** Light weight cotton cloth with a plain weave. **Chintz:** This word is derived from the Hindi word 'chhint', which is a type of cloth with small and colourful flowery designs. **Bandanna:** This word is derived from the word 'bandhna', which referred to a variety of brightly-coloured cloth produced through the method of tying and dyeing. Nowadays, this denotes a coloured and printed scarf for the neck or head. **Spinning Jenny:** A machine through which a single spinner could weave multiple spinners on to which the thread was spun. When the wheel was turned, all the spinners also rotated. **Charkha and Takli:** These were domestic spinning instruments. The thread was spun on the charkha and rolled on the takli. **Rangrez:** This referred to the dyer who dyed the cloth. **Chhipigari:** The block printer.

**Aurang:** A Persian term for 'warehouse'; a place, where goods are stored before being sold. **Smelting:** The process of deriving metal from rock or soil by heating it to very high temperature, or the process of melting metallic objects to make something new from them. **Bellows:** A device or equipment capable of pumping air. **Slag heaps:** The leftover waste while smelting metals.

**Important Dates:** **1720:** The British government implemented a legislation banning the use of printed cotton textiles called chintz. **1764:** Spinning Jenny was invented. **1786:** Invention of the steam engine. **1854:** First cotton mill was set up in India in Bombay. **1912:** TISCO (Tata Iron and Steel Company) started producing steel. **1914:** Start of the First World War. **1919:** The colonial government bought 90% of the steel produced by TISCO in India.

## Chapter 8 Civilising The "Native", Educating The Nation

In the earlier chapters you have seen how British rule

affected rajas and nawabs, peasants and tribals. In this chapter we will try and understand what implication it had for the lives of students. For, the British in India wanted not only territorial conquest and control over revenues. They also felt that they had a cultural mission: they had to “civilise the natives”, change their customs and values.

What changes were to be introduced? How were Indians to be educated, “civilised”, and made into what the British believed were “good subjects”? The British could find no simple answers to these questions. They continued to be debated for many decades.

### How the British saw Education

Let us look at what the British thought and did, and how some of the ideas of education that we now take for granted evolved in the last two hundred years. In the process of this enquiry we will also see how Indians reacted to British ideas, and how they developed their own views about how Indians were to be educated.

### The tradition of Orientalism

In 1783, a person named William Jones set up the Asiatic Society of Bengal, and started a journal called Asiatick Researches.

Jones and Colebrooke came to represent a particular attitude towards India. They shared a deep respect for ancient cultures, both of India and the West. Indian civilisation, they felt, had attained its glory in the ancient past, but had subsequently declined. In order to understand India it was necessary to discover the sacred and legal texts that were produced in the ancient period. So Jones and Colebrooke went about discovering ancient texts, understanding their meaning, translating them, and making their findings known to others. This project, they believed, would not only help the British learn from Indian culture, but it would also help Indians rediscover their own heritage, and understand the lost glories of their past. In this process the British would become the guardians of Indian culture as well as its masters.

Influenced by such ideas, many Company officials argued that the British should promote Indian rather than Western learning. They felt that institutions should be set up to encourage the study of ancient Indian texts and teach Sanskrit and Persian literature and poetry. The officials also thought that Hindus and Muslims ought to be taught what they were already familiar with, and what they valued and treasured, not subjects that were alien to them. Only then, they believed, could the British hope to win a place in the hearts of the “natives”; only then could the alien rulers expect to be respected by their subjects.

With this object in view a madrasa was set up in Calcutta in 1781 to promote the study of Arabic, Persian and Islamic law; and the Hindu College was established in Benaras in 1791 to encourage the study of ancient Sanskrit texts that would be useful for the administration of the country. Not all officials shared these views. Many were very strong in their criticism of the Orientalists.

### “Grave errors of the East”

From the early nineteenth century many British officials began to criticise the Orientalist vision of learning. They said that knowledge of the East was full of errors and unscientific thought; So they argued that it was wrong on the part of the British to spend so much effort in encouraging the study of Arabic and Sanskrit language and literature.

James Mill was one of those who attacked the Orientalists. The British effort, he declared, should not

be to teach what the natives wanted, or what they respected, in order to please them and “win a place in their heart”. The aim of education ought to be to teach what was useful and practical. So Indians should be made familiar with the scientific and technical advances that the West had made, rather than with the poetry and sacred literature of the Orient.

By the 1830s the attack on the Orientalists became sharper. One of the most outspoken and influential of such critics of the time was Thomas Babington Macaulay. He saw India as an uncivilised country that needed to be civilised. No branch of Eastern knowledge, according to him could be compared to what England had produced. Who could deny, declared Macaulay, that “a single shelf of a good European library was worth the whole native literature of India and Arabia”. He urged that the British government in India stop wasting public money in promoting Oriental learning, for it was of no practical use.

With great energy and passion, Macaulay emphasised the need to teach the English language. He felt that knowledge of English would allow Indians to read some of the finest literature the world had produced; it would make them aware of the developments in Western science and philosophy. Teaching of English could thus be a way of civilising people, changing their tastes, values and culture.

Following Macaulay’s minute, the English Education Act of 1835 was introduced. The decision was to make English the medium of instruction for higher education, and to stop the promotion of Oriental institutions like the Calcutta Madrasa and Benaras Sanskrit College. These institutions were seen as “temples of darkness that were falling of themselves into decay”. English textbooks now began to be produced for schools.

### Education for commerce

In 1854, the Court of Directors of the East India Company in London sent an educational despatch to the Governor-General in India. Issued by Charles Wood, the President of the Board of Control of the Company, it has come to be known as Wood’s Despatch. Outlining the educational policy that was to be followed in India, it emphasised once again the practical benefits of a system of European learning, as opposed to Oriental knowledge.

One of the practical uses the Despatch pointed to was economic. European learning, it said, would enable Indians to recognise the advantages that flow from the expansion of trade and commerce, and make them see the importance of developing the resources of the country. Introducing them to European ways of life, would change their tastes and desires, and create a demand for British goods, for Indians would begin to appreciate and buy things that were produced in Europe.

Wood’s Despatch also argued that European learning would improve the moral character of Indians. It would make them truthful and honest, and thus supply the Company with civil servants who could be trusted and depended upon. The literature of the East was not only full of grave errors, it could also not instill in people a sense of duty and a commitment to work, nor could it develop the skills required for administration. Following the 1854 Despatch, several measures were introduced by the British. Education departments of the government were set up to extend control over all matters regarding education. Steps were taken to establish a system of university education. In 1857, while the sepoys rose in revolt in Meerut and Delhi,

universities were being established in Calcutta, Madras and Bombay. Attempts were also made to bring about changes within the system of school education.

### **The demand for moral education**

The argument for practical education was strongly criticised by the Christian missionaries in India in the nineteenth century. The missionaries felt that education should attempt to improve the moral character of the people, and morality could be improved only through Christian education.

Until 1813, the East India Company was opposed to missionary activities in India. It feared that missionary activities would provoke reaction amongst the local population and make them suspicious of British presence in India. Unable to establish an institution within British-controlled territories, the missionaries set up a mission at Serampore in an area under the control of the Danish East India Company. A printing press was set up in 1800 and a college established in 1818.

Over the nineteenth century, missionary schools were set up all over India. After 1857, however, the British government in India was reluctant to directly support missionary education. There was a feeling that any strong attack on local customs, practices, beliefs and religious ideas might enrage “native” opinion.

### **What Happened to the Local Schools?**

Do you have any idea of how children were taught in pre-British times? Have you ever wondered whether they went to schools? And if there were schools, what happened to these under British rule?

### **The report of William Adam**

In the 1830s, William Adam, a Scottish missionary, toured the districts of Bengal and Bihar. He had been asked by the Company to report on the progress of education in vernacular schools. The report Adam produced is interesting.

Adam found that there were over 1 lakh pathshalas in Bengal and Bihar. These were small institutions with no more than 20 students each. But the total number of children being taught in these pathshalas was considerable – over 20 lakh. These institutions were set up by wealthy people, or the local community. At times they were started by a teacher (guru).

The system of education was flexible. In some places classes were held under a banyan tree, in other places in the corner of a village shop or temple, or at the guru's home. Fee depended on the income of parents: the rich had to pay more than the poor. Teaching was oral, and the guru decided what to teach, in accordance with the needs of the students. Students were not separated out into different classes: all of them sat together in one place. The guru interacted separately with groups of children with different levels of learning.

Adam discovered that this flexible system was suited to local needs. For instance, classes were not held during harvest time when rural children often worked in the fields. The pathshala started once again when the crops had been cut and stored. This meant that even children of peasant families could study.

### **New routines, new rules**

Up to the mid-nineteenth century, the Company was concerned primarily with higher education. So it allowed the local pathshalas to function without much interference. After 1854 the Company decided to improve the system of vernacular education. It felt that this could be done by introducing order within the system, imposing routines, establishing rules, ensuring regular inspections.

How was this to be done? What measures did the Company undertake? It appointed a number of government pandits, each in charge of looking after four to five schools. The task of the pandit was to visit the pathshalas and try and improve the standard of teaching. Each guru was asked to submit periodic reports and take classes according to a regular timetable. Teaching was now to be based on textbooks and learning was to be tested through a system of annual examination. Students were asked to pay a regular fee, attend regular classes, sit on fixed seats, and obey the new rules of discipline. Pathshalas which accepted the new rules were supported through government grants. Those who were unwilling to work within the new system received no government support. Over time gurus who wanted to retain their independence found it difficult to compete with the government aided and regulated pathshalas. The new rules and routines had another consequence. In the earlier system children from poor peasant families had been able to go to pathshalas, since the timetable was flexible. The discipline of the new system demanded regular attendance, even during harvest time when children of poor families had to work in the fields. Inability to attend school came to be seen as indiscipline, as evidence of the lack of desire to learn.

### **The Agenda for a National Education**

British officials were not the only people thinking about education in India. From the early nineteenth century many thinkers from different parts of India began to talk of the need for a wider spread of education. Impressed with the developments in Europe, some Indians felt that Western education would help modernise India. They urged the British to open more schools, colleges and universities, and spend more money on education. You will read about some of these efforts in Chapter 9. There were other Indians, however, who reacted against Western education. Mahatma Gandhi and Rabindranath Tagore were two such individuals. Let us look at what they had to say.

### **“English education has enslaved us”**

Mahatma Gandhi argued that colonial education created a sense of inferiority in the minds of Indians. It made them see Western civilisation as superior, and destroyed the pride they had in their own culture. There was poison in this education, said Mahatma Gandhi, it was sinful, it enslaved Indians, it cast an evil spell on them. Charmed by the West, appreciating everything that came from the West, Indians educated in these institutions began admiring British rule. Mahatma Gandhi wanted an education that could help Indians recover their sense of dignity and self-respect. During the national movement he urged students to leave educational institutions in order to show to the British that Indians were no longer willing to be enslaved. Mahatma Gandhi strongly felt that Indian languages ought to be the medium of teaching. Education in English crippled Indians, distanced them from their own social surroundings, and made them “strangers in their own lands”. Speaking a foreign tongue, despising local culture, the English educated did not know how to relate to the masses.

Western education, Mahatma Gandhi said, focused on reading and writing rather than oral knowledge; it valued textbooks rather than lived experience and practical knowledge. He argued that education ought to develop a person's mind and soul. Literacy – or simply learning to read and write – by itself did not count as education. People had to work with their hands, learn a craft, and know how different things operated. This



would develop their mind and their capacity to understand.

### “Literacy in itself is not education”

**Mahatma Gandhi wrote:** By education I mean an all-round drawing out of the best in child and man – body, mind and spirit. Literacy is not the end of education nor even the beginning. It is only one of the means whereby man and woman can be educated. Literacy in itself is not education. I would therefore begin the child’s education by teaching it a useful handicraft and enabling it to produce from the moment it begins its training... I hold that the highest development of the mind and the soul is possible under such a system of education. Only every handicraft has to be taught not merely mechanically as is done today but scientifically, i.e. the child should know the why and the wherefore of every process.

As nationalist sentiments spread, other thinkers also began thinking of a system of national education which would be radically different from that set up by the British.

### Tagore’s “abode of peace”

*Many of you may have heard of Santiniketan. Do you know why it was established and by whom?*

Tagore was of the view that creative learning could be encouraged only within a natural environment. So he chose to set up his school 100 kilometres away from Calcutta, in a rural setting. He saw it as an abode of peace (santiniketan), where living in harmony with nature, children could cultivate their natural creativity. In many senses Tagore and Mahatma Gandhi thought about education in similar ways. There were, however, differences too. Gandhiji was highly critical of Western civilisation and its worship of machines and technology. Tagore wanted to combine elements of modern Western civilisation with what he saw as the best within Indian tradition. He emphasised the need to teach science and technology at Santiniketan, along with art, music and dance.

Many individuals and thinkers were thus thinking about the way a national educational system could be fashioned. Some wanted changes within the system set up by the British, and felt that the system could be extended so as to include wider sections of people. Others urged that alternative systems be created so that people were educated into a culture that was truly national. Who was to define what was truly national? The debate about what this “national education” ought to be continued till after independence.

### ELSEWHERE

#### Education as a civilising mission

Until the introduction of the Education Act in 1870, there was no widespread education for the population as a whole for most of the nineteenth century. Child labour being widely prevalent, poor children could not be sent to school for their earning was critical for the survival of the family. The number of schools was also limited to those run by the Church or set up by wealthy individuals. It was only after the coming into force of the Education Act that schools were opened by the government and compulsory schooling was introduced. One of the most important educational thinkers of the period was Thomas Arnold, who became the headmaster of the private school Rugby favoured a secondary school curriculum which had a detailed study of the Greek and Roman classics, written 2,000 years earlier.

**Important Terms:** **Linguist:** A person who knows and studies several languages. **Orientalists:** Orientalists are those who have scholarly knowledge of the language and culture of

Asia. **Munshi:** Munshi is a person who can read, write and teach Persian. **Vernacular:** Vernacular is a term generally used to refer to a local language or dialect as distinct from what is seen as the standard language. **Madrasa:** Madrasa is an Arabic word for a place of learning; a type of school or college. **Minute:** A short note on a subject. **Pathshala:** A local school. **Guru:** The teacher. **Despatch:** An official report, for example, Wood’s Despatch. **Native:** A person born at a particular place or associated with a particular place by birth. **Important Dates:** **1781:** A Madrasa was set up in Calcutta. **1791:** The Hindu College was set up in Benaras. **1835:** The English Education Act was implemented. **1854:** Wood’s Despatch was issued. **1901:** Rabindranath Tagore founded Shantiniketan

## Chapter 9 Women, Caste And Reform

Differences between men and women were not the only ones in society. In most regions, people were divided along lines of caste. Brahmins and Kshatriyas considered themselves as “upper castes”. Others, such as traders and moneylenders (often referred to as Vaishyas) were placed after them. Then came peasants, and artisans such as weavers and potters (referred to as Shudras). At the lowest rung were those who laboured to keep cities and villages clean or worked at jobs that upper castes considered “polluting”, that is, it could lead to the loss of caste status. The upper castes also treated many of these groups at the bottom as “untouchable”. They were not allowed to enter temples, draw water from the wells used by the upper castes, or bathe in ponds where upper castes bathed. They were seen as inferior human beings.

Over the nineteenth and twentieth centuries, many of these norms and perceptions slowly changed. Let us see how this happened.

### Working Towards Change

From the early nineteenth century, we find debates and discussions about social customs and practices taking on a new character. One important reason for this was the development of new forms of communication. For the first time, books, newspapers, magazines, leaflets and pamphlets were printed. These debates were often initiated by Indian reformers and reform groups. One such reformer was Raja Rammohun Roy (1772-1833). He founded a reform association known as the Brahmo Sabha (later known as the Brahmo Samaj) in Calcutta. People such as Rammohun Roy are described as reformers because they felt that changes were necessary in society, and unjust practices needed to be done away with. They thought that the best way to ensure such changes was by persuading people to give up old practices and adopt a new way of life. Rammohun Roy was keen to spread the knowledge of Western education in the country and bring about greater freedom and equality for women. He wrote about the way women were forced to bear the burden of domestic work, confined to the home and the kitchen, and not allowed to move out and become educated.

### Changing the lives of widows

Rammohun Roy was particularly moved by the problems widows faced in their lives. He began a campaign against the practice of sati. Rammohun Roy was well versed in Sanskrit, Persian and several other Indian and European languages. He tried to show through his writings that the practice of widow burning had no sanction in ancient texts. By the early nineteenth century, as you have read in Chapter 7, many British officials had also begun to criticise Indian

traditions and customs. They were therefore more than willing to listen to Rammohun who was reputed to be a learned man. In 1829, sati was banned.

The strategy adopted by Rammohun was used by later reformers as well. Whenever they wished to challenge a practice that seemed harmful, they tried to find a verse or sentence in the ancient sacred texts that supported their point of view. They then suggested that the practice as it existed at present was against early tradition.

**ADVOCATE OF SATI:** Women are by nature of inferior understanding, without resolution, unworthy of trust ... Many of them, on the death of their husbands, become desirous of accompanying them; but to remove every chance of their trying to escape from the blazing fire, in burning them we first tie them down to the pile.

**OPPONENT OF SATI:** When did you ever afford them a fair opportunity of exhibiting their natural capacity? How then can you accuse them of want of understanding? If, after instruction in knowledge and wisdom, a person cannot comprehend or retain what has been taught him, we may consider him as deficient; but if you do not educate women how can you see them as inferior.

For instance, one of the most famous reformers, Ishwarchandra Vidyasagar, used the ancient texts to suggest that widows could remarry. His suggestion was adopted by British officials, and a law was passed in 1856 permitting widow remarriage. Those who were against the remarriage of widows opposed Vidyasagar, and even boycotted him.

By the second half of the nineteenth century, the movement in favour of widow remarriage spread to other parts of the country. In the Telugu-speaking areas of the Madras Presidency, Veerasalingam Pantulu formed an association for widow remarriage. Around the same time young intellectuals and reformers in Bombay pledged themselves to working for the same cause. In the north, Swami Dayanand Saraswati, who founded the reform association called Arya Samaj, also supported widow remarriage.

Yet, the number of widows who actually remarried remained low. Those who married were not easily accepted in society and conservative groups continued to oppose the new law.

### Girls begin going to school

Many of the reformers felt that education for girls was necessary in order to improve the condition of women. Vidyasagar in Calcutta and many other reformers in Bombay set up schools for girls. When the first schools were opened in the mid-nineteenth century, many people were afraid of them. They feared that schools would take girls away from home, prevent them from doing their domestic duties. Moreover, girls had to travel through public places in order to reach school. Many people felt that this would have a corrupting influence on them. They felt that girls should stay away from public spaces. Therefore, throughout the nineteenth century, most educated women were taught at home by liberal fathers or husbands. Sometimes women taught themselves. Do you remember what you read about Rashundari Debi in your book Social and Political Life last year? She was one of those who secretly learned to read and write in the flickering light of candles at night.

In the latter part of the century, schools for girls were established by the Arya Samaj in Punjab, and Jyotirao Phule in Maharashtra.

From the early twentieth century, Muslim women like

the Begums of Bhopal played a notable role in promoting education among women. They founded a primary school for girls at Aligarh. Another remarkable woman, Begum Rokeya Sakhawat Hossain started schools for Muslim girls in Patna and Calcutta. She was a fearless critic of conservative ideas, arguing that religious leaders of every faith accorded an inferior place to women.

By the 1880s, Indian women began to enter universities. Some of them trained to be doctors, some became teachers. Many women began to write and publish their critical views on the place of women in society. Tarabai Shinde, a woman educated at home at Poona, published a book, *Stripurushtulna*, (A Comparison between Women and Men), criticising the social differences between men and women.

Pandita Ramabai, a great scholar of Sanskrit, felt that Hinduism was oppressive towards women, and wrote a book about the miserable lives of upper-caste Hindu women. She founded a widows' home at Poona to provide shelter to widows who had been treated badly by their husbands' relatives. Here women were trained so that they could support themselves economically.

Needless to say, all this more than alarmed the orthodox. For instance, many Hindu nationalists felt that Hindu women were adopting Western ways and that this would corrupt Hindu culture and erode family values. Orthodox Muslims were also worried about the impact of these changes.

As you can see, by the end of the nineteenth century, women themselves were actively working for reform. They wrote books, edited magazines, founded schools and training centres, and set up women's associations. From the early twentieth century, they formed political pressure groups to push through laws for female suffrage (the right to vote) and better health care and education for women. Some of them joined various kinds of nationalist and socialist movements from the 1920s.

In the twentieth century, leaders such as Jawaharlal Nehru and Subhas Chandra Bose lent their support to demands for greater equality and freedom for women. Nationalist leaders promised that there would be full suffrage for all men and women after Independence. However, till then they asked women to concentrate on the anti-British struggles.

With the growth of women's organisations and writings on these issues, the momentum for reform gained strength. People challenged another established custom – that of child marriage. There were a number of Indian legislators in the Central Legislative Assembly who fought to make a law preventing child marriage. In 1929 the Child Marriage Restraint Act was passed without the kind of bitter debates and struggles that earlier laws had seen. According to the Act no man below the age of 18 and woman below the age of 16 could marry. Subsequently these limits were raised to 21 for men and 18 for women.

### Caste and Social Reform

Some of the social reformers we have been discussing also criticised caste inequalities. Rammohun Roy translated an old Buddhist text that was critical of caste. The Prarthana Samaj adhered to the tradition of Bhakti that believed in spiritual equality of all castes. In Bombay, the Paramhans Mandali was founded in 1840 to work for the abolition of caste. Many of these reformers and members of reform associations were people of upper castes. Often, in secret meetings, these reformers would violate caste taboos on food and touch,

in an effort to get rid of the hold of caste prejudice in their lives.

There were also others who questioned the injustices of the caste social order. During the course of the nineteenth century, Christian missionaries began setting up schools for tribal groups and “lower”-caste children. These children were thus equipped with some resources to make their way into a changing world.

At the same time, the poor began leaving their villages to look for jobs that were opening up in the cities. There was work in the factories that were coming up, and jobs in municipalities. You have read about the expansion of cities in Chapter 6. Think of the new demands of labour this created. Drains had to be dug, roads laid, buildings constructed, and cities cleaned. This required coolies, diggers, carriers, bricklayers, sewage cleaners, sweepers, palanquin bearers, rickshaw pullers. Where did this labour come from?

The poor from the villages and small towns, many of them from low castes, began moving to the cities where there was a new demand for labour. Some also went to work in plantations in Assam, Mauritius, Trinidad and Indonesia. Work in the new locations was often very hard. But the poor, the people from low castes, saw this as an opportunity to get away from the oppressive hold that upper-caste landowners exercised over their lives and the daily humiliation they suffered.

### Who could produce shoes?

Leatherworkers have been traditionally held in contempt since they work with dead animals which are seen as dirty and polluting. During the First World War, however, there was a huge demand for shoes for the armies. Caste prejudice against leather work meant that only the traditional leather workers and shoemakers were ready to supply army shoes. So they could ask for high prices and gain impressive profits.

### Demands for equality and justice

There were other jobs too. The army, for instance, offered opportunities. A number of Mahar people, who were regarded as untouchable, found jobs in the Mahar Regiment. The father of B.R. Ambedkar, the leader of the Dalit movement, taught at an army school.

### No place inside the classroom

In the Bombay Presidency, as late as 1829, untouchables were not allowed into even government schools. When some of them pressed hard for that right, they were allowed to sit on the veranda outside the classroom and listen to the lessons, without “polluting” the room where upper-caste boys were taught.

### Demands for equality and justice

Gradually, by the second half of the nineteenth century, people from within the Non-Brahman castes began organising movements against caste discrimination, and demanded social equality and justice.

The Satnami movement in Central India was founded by Ghasidas who worked among the leatherworkers and organised a movement to improve their social status. In eastern Bengal, Haridas Thakur’s Matua sect worked among Chandala cultivators. Haridas questioned Brahmanical texts that supported the caste system. In what is present-day Kerala, a guru from Ezhava caste, Shri Narayana Guru, proclaimed the ideals of unity for his people. He argued against treating people unequally on the basis of caste differences. According to him, all humankind belonged to the same caste. One of his famous statements was: “oru jati, oru matam, oru daivam manushyanu” (one caste, one religion, one god for humankind).

All these sects were founded by leaders who came from Non-Brahman castes and worked amongst them. They tried to change those habits and practices which provoked the contempt of dominant castes. They tried to create a sense of self-esteem among the subordinate castes. □

### Gulamgiri

One of the most vocal amongst the “low-caste” leaders was Jyotirao Phule. Born in 1827, he studied in schools set up by Christian missionaries. On growing up he developed his own ideas about the injustices of caste society. He set out to attack the Brahmans’ claim that they were superior to others, since they were Aryans. Phule argued that the Aryans were foreigners, who came from outside the subcontinent, and defeated and subjugated the true children of the country – those who had lived here from before the coming of the Aryans. As the Aryans established their dominance, they began looking at the defeated population as inferior, as low-caste people. According to Phule, the “upper” castes had no right to their land and power: in reality, the land belonged to indigenous people, the so-called low castes. Phule claimed that before Aryan rule there existed a golden age when warrior-peasants tilled the land and ruled the Maratha countryside in just and fair ways. He proposed that Shudras (labouring castes) and Ati Shudras (untouchables) should unite to challenge caste discrimination. The Satyashodhak Samaj, an association Phule founded, propagated caste equality.

In 1873, Phule wrote a book named *Gulamgiri*, meaning slavery. Some ten years before this, the American Civil War had been fought, leading to the end of slavery in America. Phule dedicated his book to all those Americans who had fought to free slaves, thus establishing a link between the conditions of the “lower” castes in India and the black slaves in America. As this example shows, Phule extended his criticism of the caste system to argue against all forms of inequality. He was concerned about the plight of “upper”-caste women, the miseries of the labourer, and the humiliation of the “low” castes. This movement for caste reform was continued in the twentieth century by other great dalit leaders like Dr B.R. Ambedkar in western India and E.V. Ramaswamy Naicker in the south.

### Who could enter temples?

Ambedkar was born into a Mahar family. As a child he experienced what caste prejudice meant in everyday life. In school he was forced to sit outside the classroom on the ground, and was not allowed to drink water from taps that upper-caste children used. After finishing school, he got a fellowship to go to the US for higher studies. On his return to India in 1919, he wrote extensively about “upper”-caste power in contemporary society.

In 1927, Ambedkar started a temple entry movement, in which his Mahar caste followers participated. Brahman priests were outraged when the Dalits used water from the temple tank.

Ambedkar led three such movements for temple entry between 1927 and 1935. His aim was to make everyone see the power of caste prejudices within society.

### The Non-Brahman movement

In the early twentieth century, the non-Brahman movement started. The initiative came from those non-Brahman castes that had acquired access to education, wealth and influence. They argued that Brahmans were heirs of Aryan invaders from the north who had conquered southern lands from the original inhabitants



of the region – the indigenous Dravidian races. They also challenged Brahmanical claims to power. E.V. Ramaswamy Naicker, or Periyar, as he was called, came from a middle-class family. Interestingly, he had been an ascetic in his early life and had studied Sanskrit scriptures carefully. Later, he became a member of the Congress, only to leave it in disgust when he found that at a feast organised by nationalists, seating arrangements followed caste distinctions – that is, the lower castes were made to sit at a distance from the upper castes. Convinced that untouchables had to fight for their dignity, Periyar founded the Self Respect Movement. He argued that untouchables were the true upholders of an original Tamil and Dravidian culture which had been subjugated by Brahmins. He felt that all religious authorities saw social divisions and inequality as God-given. Untouchables had to free themselves, therefore, from all religions in order to achieve social equality. Periyar was an outspoken critic of Hindu scriptures, especially the Codes of Manu, the ancient lawgiver, and the Bhagavad Gita and the Ramayana. He said that these texts had been used to establish the authority of Brahmins over lower castes and the domination of men over women.

These assertions did not go unchallenged. The forceful speeches, writings and movements of lower-caste leaders did lead to rethinking and some self-criticism among upper-caste nationalist leaders. But orthodox Hindu society also reacted by founding Sanatan Dharma Sabhas and the Bharat Dharma Mahamandal in the north, and associations like the Brahman Sabha in Bengal. The object of these associations was to uphold caste distinctions as a cornerstone of Hinduism, and show how this was sanctified by scriptures. Debates and struggles over caste continued beyond the colonial period and are still going on in our own times.

### The Brahmo Samaj

The Brahmo Samaj, formed in 1830, prohibited all forms of idolatry and sacrifice, believed in the Upanishads, and forbade its members from criticising other religious practices. It critically drew upon the ideals of religions – especially of Hinduism and Christianity – looking at their negative and positive dimensions.

### Derozio and Young Bengal

Henry Louis Vivian Derozio, a teacher at Hindu College, Calcutta, in the 1820s, promoted radical ideas and encouraged his pupils to question all authority. Referred to as the Young Bengal Movement, his students attacked tradition and custom, demanded education for women and campaigned for the freedom of thought and expression.

### The Ramakrishna Mission and Vivekananda

Named after Ramakrishna Paramhansa, Swami Vivekananda's guru, the Ramakrishna Mission stressed the ideal of salvation through social service and selfless action.

### The Prarthana Samaj

Established in 1867 at Bombay, the Prarthana Samaj sought to remove caste restrictions, abolish child marriage, encourage the education of women, and end the ban on widow remarriage. Its religious meetings drew upon Hindu, Buddhist and Christian texts.

### The Veda Samaj

Established in Madras (Chennai) in 1864, the Veda Samaj was inspired by the Brahmo Samaj. It worked to abolish caste distinctions and promote widow remarriage and women's education. Its members believed in one God. They condemned the superstitions and rituals of orthodox Hinduism.

### The Aligarh Movement

The Mohammedan Anglo-Oriental College, founded by Sayyid Ahmed Khan in 1875 at Aligarh, later became the Aligarh Muslim University. The institution offered modern education, including Western science, to Muslims. The Aligarh Movement, as it was known, had an enormous impact in the area of educational reform.

### The Singh Sabha Movement

Reform organisations of the Sikhs, the first Singh Sabhas were formed at Amritsar in 1873 and at Lahore in 1879. The Sabhas sought to rid Sikhism of superstitions, caste distinctions and practices seen by them as non-Sikh. They promoted education among the Sikhs, often combining modern instruction with Sikh teachings.

### ELSEWHERE

#### Black slaves and white planters

You have read about how Jyotirao Phule established a connection in his book *Gulamgiri* between caste oppression and the practice of slavery in America. What was this system of slavery?

From the time that European explorers and traders landed in Africa in the seventeenth century, a trade in slaves began. Black people were captured and brought from Africa to America, sold to white planters, and made to work on cotton and other plantations – most of them in the southern United States. In the plantations they had to work long hours, typically from dawn to dusk, punished for “inefficient work”, and whipped and tortured.

Many people, white and black, opposed slavery through organised protest. In doing so, they invoked the spirit of the American Revolution of 1776, exhorting: “See your Declaration, Americans, Do you understand your own language?” In his moving Gettysburg Address, Abraham Lincoln held that those who had fought slavery had done so for the cause of democracy. He urged the people to strive for racial equality so that “government of the people, by the people, for the people, shall not perish from the earth”.

**Important Terms:** **Sati:** It meant ‘virtuous women’. These women embraced death by burning on the funeral pyre of their husbands. **Untouchables:** The lowest class people. They were denied entry at public places. **Suffrage:** The right to vote. **Conservative:** Those people who wish to stick to old customs and traditions and oppose change.

**Important Dates: 1772-1833:** The period of Raja Rammohan Roy. **1820s:** Henry Louis Vivian Derozio, a professor at Hindu College, Calcutta, founded the Young Bengal Movement to promote radical ideas and encouraged his students to question all authority. **1829:** Sati system was abolished. **1830:** Brahmo Samaj was founded by Raja Rammohan Roy to abolish all forms of idolatry and sacrifice. **1856:** A law was passed to allow widow remarriage. **1864:** The Veda Samaj was founded. **1867:** The Prarthana Samaj worked in the direction of abolishing caste restrictions, encouraging the education of women, etc. **1873:** Jyotiba Phule wrote a book entitled ‘*Gulamgiri*’. He established the Satyashodhak Samaj. **1875:** The Arya Samaj was established; Sir Sayyid Ahmad Khan founded the Mohammedan Anglo Oriental College at Aligarh. **1880s:** Indian women began to enter in universities. **1929:** Child Marriage Restraint Act was passed. **1927-1935:** Ambedkar led three Temple movements in this period.

## Chapter 10

### The Changing World Of Visual Arts

In this chapter we will be looking at the changes in the world of visual arts during the colonial period, and how these changes are linked to the wider history of colonialism and nationalism. Colonial rule introduced several new art forms, styles,

materials and techniques which were creatively adapted by Indian artists for local patrons and markets, in both elite and popular circles. You will find that many of the visual forms that you take for granted today – say, a grand public building with domes, columns and arches; a scenic landscape, the realistic human image in a portrait, or in popular icons of gods and goddesses; a mechanically printed and mass-produced picture – had their origins in the period we will discuss in this chapter. To understand this history we will focus primarily on the changes in one sphere – painting and print making.

### New Forms of Imperial Art

From the eighteenth century a stream of European artists came to India along with the British traders and rulers. The artists brought with them new styles and new **conventions** of painting. They began producing pictures which became widely popular in Europe and helped shape Western perceptions of India. European artists brought with them the idea of realism. This was a belief that artists had to observe carefully and depict faithfully what the eye saw. What the artist produced was expected to look real and lifelike. European artists also brought with them the technique of oil painting – a technique with which Indian artists were not very familiar. Oil painting enabled artists to produce images that looked real.

### Looking for the picturesque

One popular imperial tradition was that of picturesque landscape painting. What was the picturesque? This style of painting depicted India as a quaint land, to be explored by travelling British artists; its landscape was rugged and wild, seemingly untamed by human hands. Thomas Daniell and his nephew William Daniell were the most famous of the artists who painted within this tradition.

### Portraits of authority

Another tradition of art that became immensely popular in colonial India was portrait painting. The rich and the powerful, both British and Indian, wanted to see themselves on canvas. Unlike the existing Indian tradition of painting portraits in miniature, colonial portraits were life-size images that looked lifelike and real. The size of the paintings itself projected the importance of the patrons who commissioned these portraits. This new style of **portraiture** also served as an ideal means of displaying the lavish lifestyles, wealth and status that the empire generated. One of the most famous of the visiting European painters was Johann Zoffany.

### Painting history

There was a third category of imperial art, called “history painting”. This tradition sought to dramatise and recreate various episodes of British imperial history, and enjoyed great prestige and popularity during the late eighteenth and early nineteenth centuries.

British victories in India served as rich material for history painters in Britain. These painters drew on first-hand sketches and accounts of travellers to depict for the British public a favourable image of British actions in India. These paintings once again celebrated the British: their power, their victories, their supremacy. The celebration of British military triumph can be seen in the many paintings. Imperial history paintings sought to create a public memory of imperial triumphs. Victories had to be remembered, implanted in the memory of people, both in India and Britain. Only then could the British appear invincible and all-powerful.

### What Happened to the Court Artists?

What happened to artists who earlier painted miniatures? How did the painters at Indian courts react to the new traditions of imperial art?

We can see different trends in different courts. In Mysore, Tipu Sultan continued to encourage local traditions, and had the walls of his palace at Seringapatam covered with mural paintings done by local artists.

The court at Murshidabad encouraged local miniature artists to absorb the tastes and artistic styles of the British. Local miniature artists at Murshidabad began adopting elements of European realism.

With the establishment of British power many of the local courts lost their influence and wealth. They could no longer support painters and pay them to paint for the court. How could the artists earn a living? Many of them turned to the British.

At the same time, British officials, who found the world in the colonies different from that back home, wanted images through which they could understand India, remember their life in India, and depict India to the Western world. So we find local painters producing a vast number of images of local plants and animals, historical buildings and monuments, festivals and processions, trades and crafts, castes and communities. These pictures, eagerly collected by the East India Company officials, came to be known as Company paintings.

### The New Popular Indian Art

In the nineteenth century a new world of popular art developed in many of the cities of India.

In Bengal, around the pilgrimage centre of the temple of Kalighat, local village **scroll painters** (called patuas) and potters (called kumors in eastern India and kumhars in north India) began developing a new style of art. They moved from the surrounding villages into Calcutta in the early nineteenth century. This was a time when the city was expanding as a commercial and administrative centre. Village artists too came and settled in the city in the hope of new patrons and new buyers of their art. Before the nineteenth century, the village patuas and kumors had worked on mythological themes and produced images of gods and goddesses. On shifting to Kalighat, they continued to paint these religious images. Traditionally, the figures in scroll paintings looked flat, not rounded. Now Kalighat painters began to use shading to give them a rounded form, to make the images look three-dimensional. Yet the images were not realistic and lifelike. In fact, what is specially to be noted in these early Kalighat paintings is the use of a bold, deliberately non-realistic style, where the figures emerge large and powerful, with a minimum of lines, detail and colours.

Notice how the artists have modernised traditional images. Hanuman is wearing footwear which became popular in the nineteenth century.

After the 1840s, we see a new trend within the Kalighat artists. Living in a society where values, tastes, social norms and customs were undergoing rapid changes, Kalighat artists responded to the world around, and produced paintings on social and political themes. Many of the late-nineteenth-century Kalighat paintings depict social life under British rule. Often the artists mocked at the changes they saw around, ridiculing the new tastes of those who spoke in English and adopted Western habits, dressed like sahibs, smoked cigarettes, or sat on chairs. They made fun of the westernised baboo, criticised the corrupt priests, and warned against women moving out of their homes. They often

expressed the anger of common people against the rich, and the fear many people had about dramatic changes of social norms.

Many of these Kalighat pictures were printed in large numbers and sold in the market. Initially, the images were engraved in wooden blocks. The carved block was inked, pressed against paper, and then the woodcut prints that were produced were coloured by hand. In this way, many copies could be produced from the same block. By the late-nineteenth century, mechanical printing presses were set up in different parts of India, which allowed prints to be produced in even larger numbers. These prints could therefore be sold cheap in the market. Even the poor could buy them.

By the mid-nineteenth century photographers from Europe began travelling to India, taking pictures, setting up studios, and establishing photographic societies to promote the art of photography. Some of them were portrait painters who began taking photographs of imperial officials, presenting them as figures of authority and power.

By the late nineteenth century Indian photographers began taking pictures that often offer us a different image of India. They recorded the nationalist marches and meetings, as well as the everyday life of the people.

### The Search for a National Art

Towards the end of the nineteenth century, a stronger connection was established between art and nationalism. Many painters now tried to develop a style that could be considered both modern and Indian.

### The art of Raja Ravi Varma

Raja Ravi Varma was one of the first artists who tried to create a style that was both modern and national. Ravi Varma belonged to the family of the Maharajas of Travancore in Kerala, and was addressed as Raja. He mastered the Western art of oil painting and realistic life study, but painted themes from Indian mythology. He dramatised on canvas, scene after scene from the Ramayana and the Mahabharata, drawing on the theatrical performances of mythological stories that he witnessed during his tour of the Bombay Presidency. From the 1880s, Ravi Varma's mythological paintings became the rage among Indian princes and art collectors, who filled their palace galleries with his works.

Responding to the huge popular appeal of such paintings, Ravi Varma decided to set up a picture production team and printing press on the outskirts of Bombay. Here colour prints of his religious paintings were mass produced. Even the poor could now buy these cheap prints.

### A different vision of national art

In Bengal, a new group of nationalist artists gathered around Abanindranath Tagore (1871-1951), the nephew of Rabindranath Tagore. They rejected the art of Ravi Varma as imitative and westernised, and declared that such a style was unsuitable for depicting the nation's ancient myths and legends. They felt that a genuine Indian style of painting had to draw inspiration from non-Western art traditions, and try to capture the spiritual essence of the East. So they broke away from the convention of oil painting and the realistic style, and turned for inspiration to medieval Indian traditions of miniature painting and the ancient art of mural painting in the Ajanta caves. They were also influenced by the art of Japanese artists who visited India at that time to develop an Asian art movement. Nandalal Bose was a student of Abanindranath Tagore.

Notice the lyrical flow of lines, the elongated limbs and the postures of the figures.

Abanindranath and Nandalal did not simply follow an earlier style. They modified it and made it their own. In this painting you can see how Nandalal uses shading to give a three-dimensional effect to the figures. You will not find this in Ajanta paintings.

The effort to define what ought to be an authentic Indian style of art continued. After the 1920s, a new generation of artists began to break away from the style popularised by Abanindranath Tagore. Some saw it as sentimental, others thought that spiritualism could not be seen as the central feature of Indian culture. They felt that artists had to explore real life instead of illustrating ancient books, and look for inspiration from living folk art and tribal designs rather than ancient art forms. As the debates continued, new movements of art grew and styles of art changed.

### ELSEWHERE

#### Kakuzo and the movement for an Asian art

In 1904, Okakura Kakuzo published a book in Japan called *The Ideals of the East*. This book is famous for its opening lines: "Asia is one." Okakura argued that Asia had been humiliated by the West and Asian nations had to collectively resist Western domination.

Okakura researched on Japanese art and emphasised the need to save traditional techniques of traditional Japanese art at a time they were being replaced by Western-style painting. He tried to define what modern art could be and how tradition could be retained and modernised. He was the principal founder of the first Japanese art academy.

Okakura visited Santiniketan and had a powerful influence on Rabindranath Tagore and Abanindranath Tagore.

**Important Terms: Picturesque:** Picturesque is something, which is visually very appealing or impressive often by virtue of quaintness or unusualness or through seeming fit for a painting. **Engraving:** Engraving is the incising of a design onto a hard, usually flat surface, by cutting grooves into it.

**Convention:** An accepted way of behaving, especially in social situations, often following an old way of thinking or a custom in a particular society. **Portrait – A picture of a person in which the face and its expression is prominent**

**Portraiture – The art of making portraits** **Commission – To formally choose someone to do a special piece of work usually against payment** **Mural – A wall painting** **Perspective – The way that objects appear smaller when they are further away and the way parallel lines appear to meet each other at a point in the distance** **Scroll painting** Painting on a long roll of paper that could be rolled up. **Life study – Study of human figures from living models who pose for the artists**

**Important Dates: 1785:** European artists Thomas Daniell and his nephew William Daniell visited India. **Mid 1780s:** Famous European painter Johann Zoffany came to India. **1770s:** Nawab Muhammad Ali Khan of Arcot became a dependent pensioner of EEIC after war with the Britishers. **1799:** Tipu Sultan was defeated in the Battle of Seringapatam. **1780:** Famous battle of Polilur took place, in which Tipu Sultan and Haidar Ali defeated the English troops. **1878-1887:** Victoria Terminus railway station was built in Bombay.

## Chapter 11 The Making Of The National Movement: 1870s--1947

### The Emergence of Nationalism

British exploitative policies during late 18<sup>th</sup> and early 19<sup>th</sup> centuries led the people to ask a crucial question: what is this country of India and for whom is it meant? The



answer that gradually emerged was: India was the people of India – all the people irrespective of class, colour, caste, creed, language, or gender. And the country, its resources and systems, were meant for all of them. With this answer came the awareness that the British were exercising control over the resources of India and the lives of its people, and until this control was ended India could not be for Indians.

This consciousness began to be clearly stated by the political associations formed after 1850, especially those that came into being in the 1870s and 1880s. Most of these were led by English-educated professionals such as lawyers. The more important ones were the Poona Sarvajanik Sabha, the Indian Association, the Madras Mahajan Sabha, the Bombay Presidency Association, and of course the Indian National Congress.

Note the name, “Poona Sarvajanik Sabha”. The literal meaning of “sarvajanik” is “of or for all the people” (sarva = all + janik = of the people). Though many of these associations functioned in specific parts of the country, their goals were stated as the goals of all the people of India, not those of any one region, community or class. They worked with the idea that the people should be **sovereign** – a modern consciousness and a key feature of nationalism. In other words, they believed that the Indian people should be empowered to take decisions regarding their affairs.

The dissatisfaction with British rule intensified in the 1870s and 1880s. The Arms Act was passed in 1878, disallowing Indians from possessing arms. In the same year the Vernacular Press Act was also enacted in an effort to silence those who were critical of the government. The Act allowed the government to confiscate the assets of newspapers including their printing presses if the newspapers published anything that was found “objectionable”. In 1883, there was a furore over the attempt by the government to introduce the Ilbert Bill. The bill provided for the trial of British or European persons by Indians, and sought equality between British and Indian judges in the country. But when white opposition forced the government to withdraw the bill, Indians were enraged. The event highlighted the racial attitudes of the British in India. The need for an all-India organisation of educated Indians had been felt since 1880, but the Ilbert Bill controversy deepened this desire. The Indian National Congress was established when 72 delegates from all over the country met at Bombay in December 1885. The early leadership – Dadabhai Naoroji, Pherozeshah Mehta, Badruddin Tyabji, W.C. Bonnerji, Surendranath Banerji, Romesh Chandra Dutt, S. Subramania Iyer, among others – was largely from Bombay and Calcutta. Naoroji, a businessman and **publicist** settled in London, and for a time member of the British Parliament, guided the younger nationalists. A retired British official, A.O. Hume, also played a part in bringing Indians from the various regions together.

### A nation in the making

It has often been said that the Congress in the first twenty years was “moderate” in its objectives and methods. During this period it demanded a greater voice for Indians in the government and in administration. It wanted the Legislative Councils to be made more representative, given more power, and introduced in provinces where none existed. It demanded that Indians be placed in high positions in the government. For this purpose it called for civil service examinations to be held in India as well, not just in London.

Naoroji's book *Poverty and Un-British Rule in India*

offered a scathing criticism of the economic impact of British rule.

The demand for Indianisation of the administration was part of a movement against racism, since most important jobs at the time were monopolised by white officials, and the British generally assumed that Indians could not be given positions of responsibility. Since British officers were sending a major part of their large salaries home, Indianisation, it was hoped, would also reduce the drain of wealth to England. Other demands included the separation of the judiciary from the executive, the **repeal** of the Arms Act and the freedom of speech and expression.

The early Congress also raised a number of economic issues. It declared that British rule had led to poverty and famines: increase in the land revenue had impoverished peasants and zamindars, and exports of grains to Europe had created food shortages. The Congress demanded reduction of revenue, cut in military expenditure, and more funds for irrigation. It passed many resolutions on the salt tax, treatment of Indian labourers abroad, and the sufferings of forest dwellers – caused by an interfering forest administration. All this shows that despite being a body of the educated elite, the Congress did not talk only on behalf of professional groups, zamindars or industrialists.

The Moderate leaders wanted to develop public awareness about the unjust nature of British rule. They published newspapers, wrote articles, and showed how British rule was leading to the economic ruin of the country. They criticised British rule in their speeches and sent representatives to different parts of the country to mobilise public opinion. They felt that the British had respect for the ideals of freedom and justice, and so they would accept the just demands of Indians. What was necessary, therefore, was to express these demands, and make the government aware of the feelings of Indians.

### “Freedom is our birthright”

By the 1890s many Indians began to raise questions about the political style of the Congress. In Bengal, Maharashtra and Punjab, leaders such as Bepin Chandra Pal, Bal Gangadhar Tilak and Lala Lajpat Rai were beginning to explore more radical objectives and methods. They criticised the Moderates for their “politics of prayers”, and emphasised the importance of self-reliance and constructive work. They argued that people must rely on their own strength, not on the “good” intentions of the government; people must fight for swaraj. Tilak raised the slogan, “Freedom is my birthright and I shall have it”

In 1905 Viceroy Curzon partitioned Bengal. At that time Bengal was the biggest province of British India and included Bihar and parts of Orissa. The British argued for dividing Bengal for reasons of administrative convenience. But what did “administrative convenience” mean? Whose “convenience” did it represent? Clearly, it was closely tied to the interests of British officials and businessmen. Even so, instead of removing the non-Bengali areas from the province, the government separated East Bengal and merged it with Assam. Perhaps the main British motives were to curtail the influence of Bengali politicians and to split the Bengali people.

The partition of Bengal infuriated people all over India. All sections of the Congress – the Moderates and the Radicals, as they may be called – opposed it. Large public meetings and demonstrations were organised and novel methods of mass protest developed. The struggle

that unfolded came to be known as the Swadeshi movement, strongest in Bengal but with echoes elsewhere too – in deltaic Andhra for instance, it was known as the Vandemataram Movement.

The Swadeshi movement sought to oppose British rule and encourage the ideas of self-help, swadeshi enterprise, national education, and use of Indian languages. To fight for swaraj, the radicals advocated mass mobilisation and boycott of British institutions and goods. Some individuals also began to suggest that “**revolutionary violence**” would be necessary to overthrow British rule.

### **Revolutionary violence**

The opening decades of the twentieth century were marked by other developments as well. A group of Muslim landlords and nawabs formed the All India Muslim League at Dacca in 1906. The League supported the partition of Bengal. It desired separate electorates for Muslims, a demand conceded by the government in 1909. Some seats in the councils were now reserved for Muslims who would be elected by Muslim voters. This tempted politicians to gather a following by distributing favours to their own religious groups.

Meanwhile, the Congress split in 1907. The Moderates were opposed to the use of boycott. They felt that it involved the use of force. After the split the Congress came to be dominated by the Moderates with Tilak's followers functioning from outside. The two groups reunited in December 1915. Next year the Congress and the Muslim League signed the historic Lucknow Pact and decided to work together for representative government in the country.

### **The Growth of Mass Nationalism**

After 1919 the struggle against British rule gradually became a mass movement, involving peasants, tribals, students and women in large numbers and occasionally factory workers as well. Certain business groups too began to actively support the Congress in the 1920s. Why was this so?

The First World War altered the economic and political situation in India. It led to a huge rise in the defence expenditure of the Government of India. The government in turn increased taxes on individual incomes and business profits. Increased military expenditure and the demands for war supplies led to a sharp rise in prices which created great difficulties for the common people. On the other hand, business groups reaped fabulous profits from the war. As you have seen, the war created a demand for industrial goods (jute bags, cloth, rails) and caused a decline of imports from other countries into India. So Indian industries expanded during the war, and Indian business groups began to demand greater opportunities for development. The war also led the British to expand their army. Villages were pressurised to supply soldiers for an alien cause. A large number of soldiers were sent to serve abroad. Many returned after the war with an understanding of the ways in which imperialist powers were exploiting the peoples of Asia and Africa and with a desire to oppose colonial rule in India. Furthermore, in 1917 there was a revolution in Russia. News about peasants' and workers' struggles and ideas of socialism circulated widely, inspiring Indian nationalists.

### **The advent of Mahatma Gandhi**

It is in these circumstances that Mahatma Gandhi emerged as a mass leader. As you may know, Gandhiji, aged 46, arrived in India in 1915 from South Africa.

Having led Indians in that country in non-violent marches against racist restrictions, he was already a respected leader, known internationally. His South African campaigns had brought him in contact with various types of Indians: Hindus, Muslims, Parsis and Christians; Gujaratis, Tamils and north Indians; and upper-class merchants, lawyers and workers. Mahatma Gandhi spent his first year in India travelling throughout the country, understanding the people, their needs and the overall situation. His earliest interventions were in local movements in Champaran, Kheda and Ahmedabad where he came into contact with Rajendra Prasad and Vallabhbhai Patel. In Ahmedabad he led a successful millworkers' strike in 1918.

In 1895, along with other Indians, Mahatma Gandhi established the Natal Congress to fight against racial discrimination. Can you identify Gandhiji? He is standing at the centre in the row at the back, wearing a coat and tie.

### **The Rowlatt Satyagraha**

In 1919 Gandhiji gave a call for a satyagraha against the Rowlatt Act that the British had just passed. The Act curbed fundamental rights such as the freedom of expression and strengthened police powers. Mahatma Gandhi, Mohammad Ali Jinnah and others felt that the government had no right to restrict people's basic freedoms. They criticised the Act as “devilish” and tyrannical. Gandhiji asked the Indian people to observe 6 April 1919 as a day of non-violent opposition to this Act, as a day of “humiliation and prayer” and hartal (strike). Satyagraha Sabhas were set up to launch the movement.

The Rowlatt Satyagraha turned out to be the first all-India struggle against the British government although it was largely restricted to cities. In April 1919 there were a number of demonstrations and hartals in the country and the government used brutal measures to suppress them. The Jallianwala Bagh atrocities, inflicted by General Dyer in Amritsar on Baisakhi day (13 April), were a part of this repression. On learning about the massacre, Rabindranath Tagore expressed the pain and anger of the country by renouncing his **knighthood**. During the Rowlatt Satyagraha the participants tried to ensure that Hindus and Muslims were united in the fight against British rule. This was also the call of Mahatma Gandhi who always saw India as a land of all the people who lived in the country – Hindus, Muslims and those of other religions. He was keen that Hindus and Muslims support each other in any just cause.

### **Khilafat agitation and the Non-Cooperation Movement**

The Khilafat issue was one such cause. In 1920 the British imposed a harsh treaty on the Turkish Sultan or Khalifa. People were furious about this as they had been about the Jallianwala massacre. Also, Indian Muslims were keen that the Khalifa be allowed to retain control over Muslim sacred places in the erstwhile Ottoman Empire. The leaders of the Khilafat agitation, Mohammad Ali and Shaukat Ali, now wished to initiate a full-fledged Non-Cooperation Movement. Gandhiji supported their call and urged the Congress to campaign against “Punjab wrongs” (Jallianwala massacre), the Khilafat wrong and demand swaraj.

The Non-Cooperation Movement gained momentum through 1921-22. Thousands of students left government-controlled schools and colleges. Many lawyers such as Motilal Nehru, C.R. Das, C.

Rajagopalachari and Asaf Ali gave up their practices. British titles were surrendered and legislatures boycotted. People lit public bonfires of foreign cloth. The imports of foreign cloth fell drastically between 1920 and 1922. But all this was merely the tip of the iceberg. Large parts of the country were on the brink of a formidable revolt.

*The eternal law of suffering: What did Mahatma Gandhi mean by ahimsa (non-violence)? How could ahimsa become the basis of struggle? This is what Gandhiji said: Non-violence comes to us through doing good continually without the slightest expectation of return. ... That is the indispensable lesson in non-violence ... In South Africa ... I succeeded in learning the eternal law of suffering as the only remedy for undoing wrong and injustice. It means positively the law of non-violence. You have to be prepared to suffer cheerfully at the hands of all and sundry and you will wish ill to no one, not even to those who may have wronged you.*

### People's initiatives

In many cases people resisted British rule non-violently. In others, different classes and groups, interpreting Gandhiji's call in their own manner, protested in ways that were not in accordance with his ideas. In either case, people linked their movements to local grievances. Let us look at a few examples.

In Kheda, Gujarat, Patidar peasants organised non-violent campaigns against the high land revenue demand of the British. In coastal Andhra and interior Tamil Nadu, liquor shops were **picketed**. In the Guntur district of Andhra Pradesh, tribals and poor peasants staged a number of "forest satyagrahas", sometimes sending their cattle into forests without paying grazing fee. They were protesting because the colonial state had restricted their use of forest resources in various ways. They believed that Gandhiji would get their taxes reduced and have the forest regulations abolished. In many forest villages, peasants proclaimed swaraj and believed that "Gandhi Raj" was about to be established. In Sind (now in Pakistan), Muslim traders and peasants were very enthusiastic about the Khilafat call. In Bengal too, the Khilafat-Non-Cooperation alliance gave enormous communal unity and strength to the national movement. In Punjab, the Akali agitation of the Sikhs sought to remove corrupt **mahants** – supported by the British – from their gurdwaras. This movement got closely identified with the Non-Cooperation Movement. In Assam, tea garden labourers, shouting "Gandhi Maharaj ki Jai", demanded a big increase in their wages. They left the British-owned plantations amidst declarations that they were following Gandhiji's wish. Interestingly, in the Assamese Vaishnava songs of the period the reference to Krishna was substituted by "Gandhi Raja".

In popular images too Mahatma Gandhi is often shown as a divine being occupying a place within the pantheon of Indian gods. In this image he is driving Krishna's chariot, guiding other nationalist leaders in the battle against the British.

### The people's Mahatma

We can see from the above that sometimes people thought of Gandhiji as a kind of messiah, as someone who could help them overcome their misery and poverty. Gandhiji wished to build class unity, not class conflict, yet peasants could imagine that he would help them in their fight against zamindars, and agricultural labourers believed he would provide them land. At times, ordinary people credited Gandhiji with their own

achievements. For instance, at the end of a powerful movement, peasants of Pratapgarh in the United Provinces (now Uttar Pradesh) managed to stop **illegal eviction** of tenants; but they felt it was Gandhiji who had won this demand for them. At other times, using Gandhiji's name, tribals and peasants undertook actions that did not conform to Gandhian ideals.

### The happenings of 1922-1929

Mahatma Gandhi, as you know, was against violent movements. He abruptly called off the Non-Cooperation Movement when in February 1922 a crowd of peasants set fire to a police station in Chauri Chaura. Twenty-two policemen were killed on that day. The peasants were provoked because the police had fired on their peaceful demonstration.

Once the Non-Cooperation movement was over, Gandhiji's followers stressed that the Congress must undertake constructive work in the rural areas. Other leaders such as Chitta Ranjan Das and Motilal Nehru argued that the party should fight elections to the councils and enter them in order to influence government policies. Through sincere social work in villages in the mid-1920s, the Gandhians were able to extend their support base. This proved to be very useful in launching the Civil Disobedience movement in 1930. Two important developments of the mid-1920s were the formation of the Rashtriya Swayamsevak Sangh (RSS), a Hindu organisation, and the Communist Party of India. These parties have held very different ideas about the kind of country India should be. Find out about their ideas with the help of your teacher. The revolutionary nationalist Bhagat Singh too was active in this period.

A major figure in the freedom movement, Das was a lawyer from East Bengal. He was especially active in the Non-Cooperation Movement.

In 1927 the British government in England decided to send a commission headed by Lord Simon to decide India's political future. The Commission had no Indian representative. The decision created an outrage in India. All political groups decided to boycott the Commission. When the Commission arrived it was met with demonstrations with banners saying "Simon Go Back". The decade closed with the Congress resolving to fight for Purna Swaraj (complete independence) in 1929 under the presidency of Jawaharlal Nehru. Consequently, "Independence Day" was observed on 26 January 1930 all over the country.

"It takes a loud voice to make the deaf hear. Inquilab Zindabad"

Revolutionary nationalists such as Bhagat Singh and his comrades wanted to fight colonial rule and the rich exploiting classes through a revolution of workers and peasants. For this purpose they founded the Hindustan Socialist Republican Association (HSRA) in 1928 at Ferozeshah Kotla in Delhi. Members of the HSRA assassinated Saunders, a police officer who had led a lathi-charge that caused the death of Lala Lajpat Rai. Along with his fellow nationalist B.K. Dutt, he threw a bomb in the Central Legislative Assembly on 8 April 1929. The aim, as their leaflet explained, was not to kill but, "to make the deaf hear", to remind the foreign government of its callous exploitation. Bhagat Singh was tried and executed at the age of 23.

### The March to Dandi

Purna Swaraj would never come on its own. It had to be fought for. In 1930, Gandhiji declared that he would lead a march to break the salt law. According to this law, the



state had a monopoly on the manufacture and sale of salt. Mahatma Gandhi along with other nationalists reasoned that it was sinful to tax salt since it is such an essential item of our food. The Salt March related the general desire of freedom to a specific grievance shared by everybody, and thus did not divide the rich and the poor.

Women from diverse backgrounds participated in the national movement. Young and old, single and married, they came from rural and urban areas, from both conservative and liberal homes. Their involvement was significant for the freedom struggle, for the women's movement, and for themselves personally.

Both British officials and Indian nationalists felt that women's participation gave the national struggle an immense force. Participation in the freedom movement brought women out of their homes. It gave them a place in the professions, in the governance of India, and it could pave the way for equality with men.

What such participation meant for women is best recounted by them. Ambabai of Karnataka had been married at age twelve. Widowed at sixteen, she picketed foreign cloth and liquor shops in Udupi. She was arrested, served a sentence and was rearrested. Between prison terms she made speeches, taught spinning, and organised prabhat pheris. Ambabai regarded these as the happiest days of her life because they gave it a new purpose and commitment. Women, however, had to fight for their right to participate in the movement. During the Salt Satyagraha, for instance, even Mahatma Gandhi was initially opposed to women's participation. Sarojini Naidu had to persuade him to allow women to join the movement.

Gandhiji and his followers marched for over 240 miles from Sabarmati to the coastal town of Dandi where they broke the government law by gathering natural salt found on the seashore, and boiling sea water to produce salt. Peasants, tribals and women participated in large numbers. A business federation published a pamphlet on the salt issue. The government tried to crush the movement through brutal action against peaceful satyagrahis. Thousands were sent to jail.

The combined struggles of the Indian people bore fruit when the Government of India Act of 1935 prescribed **provincial autonomy** and the government announced elections to the provincial legislatures in 1937. The Congress formed governments in 7 out of 11 provinces.

### **Provincial autonomy**

Capacity of the provinces to make relatively independent decisions while remaining within a federation

In September 1939, after two years of Congress rule in the provinces, the Second World War broke out. Critical of Hitler, Congress leaders were ready to support the British war effort. But in return they wanted that India be granted independence after the war. The British refused to concede the demand. The Congress ministries resigned in protest.

### **Quit India and Later**

Mahatma Gandhi decided to initiate a new phase of movement against the British in the middle of the Second World War. The British must quit India immediately, he told them. To the people he said, "do or die" in your effort to fight the British – but you must fight non-violently. Gandhiji and other leaders were jailed at once but the movement spread. It specially attracted peasants and the youth who gave up their studies to join it. Communications and symbols of state

authority were attacked all over the country. In many areas the people set up their own governments. The first response of the British was severe repression. By the end of 1943 over 90,000 people were arrested, and around 1,000 killed in police firing. In many areas orders were given to machine-gun crowds from airplanes. The rebellion, however, ultimately brought the Raj to its knees.

Demonstrators clashed with the police everywhere. Many thousands were arrested, over a thousand killed, many more were injured.

### **Towards Independence and Partition**

Meanwhile, in 1940 the Muslim League had moved a resolution demanding "Independent States" for Muslims in the north-western and eastern areas of the country. The resolution did not mention partition or Pakistan. Why did the League ask for an autonomous arrangement for the Muslims of the subcontinent?

### **Bose and the INA**

A radical nationalist, with socialist leanings, Bose did not share Gandhiji's ideal of ahimsa, though he respected him as the "Father of the Nation". In January 1941, he secretly left his Calcutta home, went to Singapore, via Germany, and raised the Azad Hind Fauj or the Indian National Army (INA), to free India from British control. In 1944 the INA tried to invade India through Imphal and Kohima but the campaign failed. The INA members were imprisoned and tried. People across the country, from all walks of life, participated in the movement against the INA trials.

Azad was born in Mecca to a Bengali father and an Arab mother. Well-versed in many languages, Azad was a scholar of Islam and an exponent of the notion of wahadat-i-deen, the essential oneness of all religions. An active participant in Gandhian movements and a staunch advocate of Hindu-Muslim unity, he was opposed to Jinnah's two-nation theory.

A veteran nationalist and leader of the Salt Satyagraha in the south, C. Rajagopalachari, popularly known as Rajaji, served as member of the Interim Government of 1946 and as free India's first Indian Governor-General. Patel hailed from an impoverished peasant-proprietor family of Nadiad, Gujarat. A foremost organiser of the freedom movement from 1918 onwards, Patel served as President of the Congress in 1931.

An ambassador of Hindu-Muslim unity until 1920, Jinnah played an important role in the making of the Lucknow Pact. He reorganised the Muslim League after 1934, and became the major spokesperson for the demand for Pakistan.

From the late 1930s, the League began viewing the Muslims as a separate "nation" from the Hindus. In developing this notion it may have been influenced by the history of tension between some Hindu and Muslim groups in the 1920s and 1930s. More importantly, the provincial elections of 1937 seemed to have convinced the League that Muslims were a minority, and they would always have to play second fiddle in any democratic structure. It feared that Muslims may even go unrepresented. The Congress's rejection of the League's desire to form a joint Congress-League government in the United Provinces in 1937 also annoyed the League.

Gandhiji's disciple, a Congress Socialist, and an internationalist, Nehru was a leading architect of the national movement and of free India's economy and polity.

The Congress's failure to mobilise the Muslim masses in

the 1930s allowed the League to widen its social support. It sought to enlarge its support in the early 1940s when most Congress leaders were in jail. At the end of the war in 1945, the British opened negotiations between the Congress, the League and themselves for the independence of India. The talks failed because the League saw itself as the sole spokesperson of India's Muslims. The Congress could not accept this claim since a large number of Muslims still supported it. Elections to the provinces were again held in 1946. The Congress did well in the **"General" constituencies** but the League's success in the seats reserved for Muslims was spectacular. It persisted with its demand for "Pakistan". In March 1946 the British cabinet sent a three-member mission to Delhi to examine this demand and to suggest a suitable political framework for a free India. This mission suggested that India should remain united and constitute itself as a loose confederation with some autonomy for Muslim-majority areas. But it could not get the Congress and the Muslim League to agree to specific details of the proposal. Partition now became more or less inevitable.

*Also known as Badshah Khan, he was the founder of the Khudai Khidmatgars, a powerful non-violent movement among the Pathans of his province. Badshah Khan was strongly opposed to the Partition of India. He criticised his Congress colleagues for agreeing to the 1947 division.*

### **"General" constituencies**

Election districts with no reservations for any religious or other community

After the failure of the Cabinet Mission, the Muslim League decided on mass agitation for winning its Pakistan demand. It announced 16 August 1946 as "Direct Action Day". On this day riots broke out in Calcutta, lasting several days and resulting in the death of thousands of people. By March 1947 violence spread to different parts of northern India.

Many hundred thousand people were killed and numerous women had to face untold brutalities during the Partition. Millions of people were forced to flee their homes. Torn asunder from their homelands, they were reduced to being refugees in alien lands. Partition also meant that India changed, many of its cities changed, and a new country – Pakistan – was born. So, the joy of our country's independence from British rule came mixed with the pain and violence of Partition.

### **ELSEWHERE**

#### **Nationalism in Africa: The case of Ghana**

The late nineteenth and early twentieth centuries witnessed the rise of nationalism in many Afro-Asian countries. In many of these, nationalism arose as a part of the anti-colonial struggles for independence. Colonial rule in Africa was dictatorial. Only the "Chiefs" were allowed to rule on behalf of the foreign powers. Alternately, laws affecting Africans were created in all-white legislatures. Africans had no decision-making powers or representation, not until after the Second World War at least. The forcible takeover of land from local owners or users, increased taxation and poor working conditions led to many African protests. In 1957, Ghana, known until then as the Gold Coast, became the first sub-Saharan African country to gain independence. The freedom movement was led by Kwame Nkrumah's Convention People's Party through strikes, boycotts and mass rallies. In 1951 this party won a huge electoral victory. It opposed the existing system in which the British rulers had allowed the Chiefs to nominate representatives to the legislature. It pressed

the British to grant a legislature that contained no nominated or special members and won this demand in 1954. Elections to the new Legislative Council were held in 1956. The Convention People's Party won these, thus paving the way for the proclamation of an independent nation under the name "Ghana".

**Important Terms:** **Swadeshi:** The broad meaning of Swadeshi is "the use of all homemade things and the exclusion of foreign things." **Satyagraha:** Satyagraha is the policy of non-violent resistance developed by Mahatma Gandhi as a means of pressing for political reforms in South Africa and India. **Sovereign:** Sovereign means the capacity to act independently without outside interference. **Publicist:** Publicist is the one who publicises an idea by circulating information, writing reports, speaking at meetings, etc. **Repeal:** Repeal refers to officially ending the validity of a law.

**Revolutionary violence:** Revolutionary violence refers to the use of violence to make a radical change within society.

**Council:** Council is an appointed or elected body of people with an administrative, advisory or representative function.

**Knighthood:** Knighthood is an honour granted by the British Crown for exceptional personal achievement or public service.

**Picket:** Picket is an act of protest by the people outside a building or shop to prevent others from entering. **Illegal**

**Eviction:** Illegal eviction is a forcible and unlawful throwing out of tenants from the land they rent. **Provincial Autonomy:**

Provincial autonomy is the capacity of the province to make relatively independent decisions while remaining within a federation. **"General" Constituencies:** "General"

constituencies are election districts with no reservations for any religious or other communities. **Nationalism:** A feeling of pride for one's own country. **Sarvajanik:** Public. **Swaraj:**

Self-rule government. **Moderates:** A group in Congress who believed that struggles should be peaceful. It had immense faith in British rule. **Radicals:** A group of people with new opinions and beliefs in the Congress. They opposed the methods of the moderates. **Refugee:** A person who is forced to leave his native country due to political, religious or social cause.

**Important Dates:** **1878:** The Arms Act and the Vernacular Press Act was passed. **1885:** Establishment of the Indian National Congress. **1905:** Partition of Bengal, start of the Swadeshi Movement. **1906:** Establishment of All India Muslim League. **1915:** Mahatma Gandhi returned from South Africa and came into India. **1916:** Lucknow Pact to achieve Hindu-Muslim unity. **1919:** Start of Rowlatt Satyagraha. **1920:** Start of Non-Cooperation Movement. **1922:** Non-Cooperation Movement called off by Gandhiji. **1929:** The Congress decided to fight to achieve 'Purna Swaraj' (complete independence). **26th January 1930:** Independence Day was observed across India. **1930:** Mahatma Gandhi started the Dandi March. **1939:** Second World War started. **August 1942:** Start of the Quit India Movement. **1945:** The Britishers opened negotiations with the Congress, Muslim League for independence of India. The talks failed as the League demanded for new Pakistan. **1947:** Partition of the country into India and Pakistan.

## **Chapter 12** **India After Independence**

### **A New and Divided Nation**

When India became independent in August 1947, it faced a series of very great challenges. As a result of Partition, 8 million refugees had come into the country from what was now Pakistan. These people had to be found homes and jobs. Then there was the problem of the princely states, almost 500 of them, each ruled by a maharaja or a nawab, each of whom had to be persuaded to join the new nation. The problems of the refugees and of the princely states had to be addressed immediately. In the longer term, the new nation had to adopt a political system that would best serve the hopes and expectations of its population. India's population in 1947 was large, almost 345 million.

It was also divided. There were divisions between high castes and low castes, between the majority Hindu community and Indians who practised other faiths. The citizens of this vast land spoke many different languages, wore many different kinds of dress, ate different kinds of food and practised different professions. How could they be made to live together in one nation-state? To the problem of unity was added the problem of development. Clearly, the new nation had to lift its masses out of poverty by increasing the productivity of agriculture and by promoting new, job-creating industries.

Unity and development had to go hand in hand. If the divisions between different sections of India were not healed, they could result in violent and costly conflicts – high castes fighting with low castes, Hindus with Muslims and so on. At the same time, if the fruits of economic development did not reach the broad masses of the population, it could create fresh divisions – for example, between the rich and the poor, between cities and the countryside, between regions of India that were prosperous and regions that lagged behind.

### A Constitution is Written

Between December 1946 and November 1949, some three hundred Indians had a series of meetings on the country's political future. These discussions resulted in the framing of the Indian Constitution, which came into effect on 26 January 1950.

One feature of the Constitution was its adoption of universal adult **franchise**. All Indians above the age of 21 would be allowed to vote in state and national elections. This was a revolutionary step – for never before had Indians been allowed to choose their own leaders.

A second feature of the Constitution was that it guaranteed equality before the law to all citizens, regardless of their caste or religious affiliation.

A third feature of the Constitution was that it offered special privileges for the poorest and most disadvantaged Indians. The practice of untouchability, described as a “slur and a blot” on the “fair name of India”, was abolished. Hindu temples, previously open to only the higher castes, were thrown open to all, including the former untouchables. After a long debate, the Constituent Assembly also recommended that a certain percentage of seats in legislatures as well as jobs in government be reserved for members of the lowest castes.

Along with the former Untouchables, the adivasis or Scheduled Tribes were also granted reservation in seats and jobs. Like the Scheduled Castes, these Indians too had been deprived and discriminated against.

The Constituent Assembly spent many days discussing the powers of the central government versus those of the state governments. Some members thought that the Centre's interests should be foremost. Only a strong Centre, it was argued, “would be in a position to think and plan for the well-being of the country as a whole”. Other members felt that the provinces should have greater autonomy and freedom.

The Constitution sought to balance these competing claims by providing three lists of subjects: a Union List, with subjects such as taxes, defence and foreign affairs, which would be the exclusive responsibility of the Centre; a State List of subjects, such as education and health, which would be taken care of principally by the states; a Concurrent List, under which would come subjects such as forests and agriculture, in which the Centre and the states would have joint responsibility.

Another major debate in the Constituent Assembly concerned language. Many members believed that the English language should leave India with the British rulers. Its place, they argued, should be taken by Hindi. However, those who did not speak Hindi were of a different opinion. Speaking in the Assembly, T.T. Krishnamachari conveyed “a warning on behalf of people of the South”, some of whom threatened to separate from India if Hindi was imposed on them. A compromise was finally arrived at: namely, that while Hindi would be the “official language” of India, English would be used in the courts, the services, and communications between one state and another. Many Indians contributed to the framing of the Constitution. But perhaps the most important role was played by Dr B.R. Ambedkar, who was Chairman of the Drafting Committee, and under whose supervision the document was finalised.

### How were States to be Formed?

Back in the 1920s, the Indian National Congress – the main party of the freedom struggle – had promised that once the country won independence, each major **linguistic** group would have its own province.

However, after independence the Congress did not take any steps to honour this promise. For India had been divided on the basis of religion: despite the wishes and efforts of Mahatma Gandhi, freedom had come not to one nation but to two. As a result of the partition of India, more than a million people had been killed in riots between Hindus and Muslims. Could the country afford further divisions on the basis of language?

Both Prime Minister Nehru and Deputy Prime Minister Vallabhbhai Patel were against the creation of linguistic states. After the Partition, Nehru said, “disruptionist tendencies had come to the fore”; to check them, the nation had to be strong and united. Or, as Patel put it: ... the first and last need of India at the present moment is that it should be made a nation ... Everything which helps the growth of nationalism has to go forward and everything which throws obstacles in its way has to be rejected ... We have applied this test to linguistic provinces also, and by this test, in our opinion [they] cannot be supported.

That the Congress leaders would now go back on their promise created great disappointment. The Kannada speakers, Malayalam speakers, the Marathi speakers, had all looked forward to having their own state. The strongest protests, however, came from the Telugu-speaking districts of what was the Madras Presidency. When Nehru went to campaign there during the general elections of 1952, he was met with black flags and slogans demanding “We want Andhra”. In October of that year, a veteran Gandhian named Potti Sriramulu went on a hunger strike demanding the formation of Andhra state to protect the interests of Telugu speakers. As the fast went on, it attracted much support. Hartals and bandhs were observed in many towns.

On 15 December 1952, fifty-eight days into his fast, Potti Sriramulu died. As a newspaper put it, “the news of the passing away of Sriramulu engulfed entire Andhra in chaos”. The protests were so widespread and intense that the central government was forced to give in to the demand. Thus, on 1 October 1953, the new state of Andhra came into being, which subsequently became Andhra Pradesh.

After the creation of Andhra, other linguistic communities also demanded their own separate states. A States Reorganisation Commission was set up, which submitted its report in 1956, recommending the



redrawing of district and provincial boundaries to form compact provinces of Assamese, Bengali, Oriya, Tamil, Malayalam, Kannada and Telugu speakers respectively. The large Hindi-speaking region of north India was also to be broken up into several states. A little later, in 1960, the bilingual state of Bombay was divided into separate states for Marathi and Gujarati speakers. In 1966, the state of Punjab was also divided into Punjab and Haryana, the former for the Punjabi speakers (who were also mostly Sikhs), the latter for the rest (who spoke not Punjabi but versions of Haryanvi or Hindi).

### **The making of Linguistic States**

\*A state ceased to be a “princely state” as and when its prince agreed to merger with India or Pakistan or was defeated. But many of these states were retained as administrative units until 31 October 1956. Hence the category, “erstwhile princely states” for the period 1947-48 to 31 October 1956.

### **Planning for Development**

Lifting India and Indians out of poverty, and building a modern technical and industrial base were among the major objectives of the new nation. In 1950, the government set up a Planning Commission to help design and execute suitable policies for economic development. There was a broad agreement on what was called a “mixed economy” model. Here, both the **State** and the private sector would play important and complementary roles in increasing production and generating jobs. What, specifically, these roles were to be – which industries should be initiated by the state and which by the market, how to achieve a balance between the different regions and states – was to be defined by the Planning Commission. In 1956, the Second Five Year Plan was formulated. This focused strongly on the development of heavy industries such as steel, and on the building of large dams. These sectors would be under the control of the State. This focus on heavy industry, and the effort at state regulation of the economy was to guide economic policy for the next few decades. This approach had many strong supporters, but also some vocal critics. Some felt that it had put inadequate emphasis on agriculture. Others argued that it had neglected primary education. Still others believed that it had not taken account of the environmental implications of economic policies. As Mahatma Gandhi’s follower Mira Behn wrote in 1949, by “science and machinery he [mankind] may get huge returns for a time, but ultimately will come desolation. We have got to study Nature’s balance, and develop our lives within her laws, if we are to survive as a physically healthy and morally decent species.”

### **The search for an independent foreign policy**

Krishna Menon led the Indian delegation to the UN between 1952 and 1962 and argued for a policy of non-alignment.

India gained freedom soon after the devastations of the Second World War. At that time a new international body – the United Nations – formed in 1945 was in its infancy. The 1950s and 1960s saw the emergence of the Cold War, that is, power rivalries and ideological conflicts between the USA and the USSR, with both countries creating military alliances. This was also the period when colonial empires were collapsing and many countries were attaining independence. Prime Minister Jawaharlal Nehru, who was also the foreign minister of newly independent India, developed free India’s foreign policy in this context. Non-alignment formed the bedrock of this foreign policy.

Led by statesmen from Egypt, Yugoslavia, Indonesia, Ghana and India, the non-aligned movement urged countries not to join either of the two major alliances. But this policy of staying away from alliances was not a matter of remaining “isolated” or “neutral”. The former means remaining aloof from world affairs whereas non-aligned countries such as India played an active role in mediating between the American and Soviet alliances. They tried to prevent war—often taking a humanitarian and moral stand against war. However, for one reason or another, many non-aligned countries including India got involved in wars.

By the 1970s, a large number of countries had joined the non-aligned movement.

Over 29 newly independent states participated in this famous conference to discuss how Afro-Asian nations could continue to oppose colonialism and Western domination.

### **ELSEWHERE**

#### **What happened in Sri Lanka**

In 1956, the year the states of India were reorganised on the basis of language, the Parliament of Sri Lanka (then Ceylon) introduced an Act recognising Sinhala as the sole official language of the country. This made Sinhala the medium of instruction in all state schools and colleges, in public examinations, and in the courts. The new Act was opposed by the Tamil-speaking minority who lived in the north of the island. “When you deny me my language,” said one Tamil MP, “you deny me everything.” “You are hoping for a divided Ceylon,” warned another, adding: “Do not fear, I assure you [that you] will have a divided Ceylon.” An Opposition member, himself Sinhala speaking, predicted that if the government did not change its mind and insisted on the Act being passed, “two torn little bleeding states might yet arise out of one little state”.

For several decades now, a civil war has raged in Sri Lanka, whose roots lie in the imposition of the Sinhala language on the Tamil-speaking minority. And another South Asian country, Pakistan, was divided into two when the Bengali speakers of the east felt that their language was being suppressed. By contrast, India has managed to survive as a single nation, in part because the many regional languages were given freedom to flourish. Had Hindi been imposed on South India, in the way that Urdu was imposed on East Pakistan or Sinhala on northern Sri Lanka, India too might have seen civil war and fragmentation. Contrary to the fears of Jawaharlal Nehru and Sardar Patel, linguistic states have not threatened the unity of India. Rather, they have deepened this unity. Once the fear of one’s language being suppressed has gone, the different linguistic groups have been content to live as part of the larger nation called India.

**Important Terms: Constitution:** It is a set of principles that a state (nation) follows to administer itself. It contains the rights and duties of the citizens and also underlines the working of different parts of the government, i.e., Executive, Legislature and Judiciary.

**Franchise:** The right to vote in an election, especially political or for any law-making organisation. **Concurrent List:** It refers to the list, which contains the subjects of governance on which both centre and states could make laws. *For example*, Health, Forest, etc.

**Linguistic:** Associated with language. **State:** Associated with the government. **Non Alignment:** The policy of remaining neutral with the superpowers of the world, namely, USA and Russia.

**Important Dates: 15th August 1947:** India attained independence. **30th January 1948:** Mahatma Gandhi was assassinated. **26th January 1950:** The Indian Constitution was adopted. **1950:** The government of India formed the Planning

Commission. **1952:** The first five year plan was initiated. **1st October 1953:** The new state of Andhra Pradesh came into existence. **1955-1960:** Tension increased on Indo-China border. **1960:** The bilingual state of Bombay was divided on linguistic basis into Marathi and Gujarati speakers. **1965 and 1971:** Two Indo-Pak Wars. **1966:** Punjab and East Patiala states union was divided into Punjab and Haryana. **1970s:** Many

countries joined the Non Aligned Movement. **1971:** Bangladesh (east Pakistan) became a separate entity. **1999:** The Kargil conflict negatively affected Indo-Pak relations.

# NCERT Class 9

## History (India and Contemporary World 1)

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 The French Revolution

##### Chapter Summary Topicwise

##### Topic-1 The Ancient Regime and its Crises

• On the morning of 14<sup>th</sup> July 1789, the city of Paris was in a state of alarm. The king had commanded the troops to move into the city. Rumours spread that the king would soon order the army to open fire upon the citizens. Some 7,000 men and women gathered in front of the town hall and decided to form a peoples' militia. They broke into a number of government buildings in search of arms.

- Finally, a group of several hundred people marched towards the eastern part of the city and stormed the fortressprison, the Bastille, where they hoped to find hoarded ammunition. In the armed fight that followed, the commander of the Bastille was killed and the prisoners released.
- The days that followed saw more rioting both in Paris and the countryside. Most people were protesting against the high price of bread. Actually, it was the beginning of a chain of events that ultimately led to the execution of the king in France, though most people at that time did not anticipate this outcome.

##### French Society during the late 18<sup>th</sup> century

- In 1774, Louis XVI of the Bourbon family of kings ascended the throne of France.
- Causes for an empty treasury of France under Louis XVI:
  - (i) Long years of war had drained the financial resources of France.
  - (ii) High cost of maintaining an extravagant court at the immense palace of Versailles.
  - (iii) Under Louis XVI, France helped the thirteen American colonies to gain their independence from the common enemy, Britain.
  - (iv) The war added more than a billion livres to a debt that had already risen to more than 2 billion livres.
  - (v) Lenders, who gave the state credit, now began to charge 10 per cent interest on loans.
- The French Society in the eighteenth century was divided into three Estates, and only members of the Third Estate paid taxes.
  - (i) The members of the First Estate, that is the clergy, enjoyed certain privileges by birth. The most important of these was exemption from paying taxes to the state.
  - (ii) The members of the Second Estate were the nobility. They enjoyed feudal privileges by birth. These included feudal dues, which they extracted from the peasants. They were also exempted from paying taxes.
  - (iii) The Third Estate comprised of peasants, artisans, landless labour, servants, lawyers, doctors,

administrative officials, traders, etc., they had to pay all taxes to the state.

- Peasants made up about 90% of the population. However, only a small number of them owned the land they cultivated.
- Peasants were obliged to render services to the lord, work in his house and fields, serve in the army or to participate in building roads.
- All members of the Third Estate had to pay taxes to the state including a direct tax, called 'taille' and a number of indirect taxes which were levied on articles of everyday consumption like salt or tobacco.

##### The Struggle to Survive

- Increasing population of France led to a rapid increase in the demand for food grains. But the production of grains could not keep pace with the demand. So the price of bread rose rapidly.
- Wages of the workers did not keep pace with the rise in prices. So the gap between the poor and the rich widened.
- Things became worse whenever drought or hail reduced the harvest. This led to a subsistence crisis, something that occurred frequently in France during the Old Regime.

##### A Growing Middle Class Envisages an End to Privileges

- The eighteenth century witnessed the emergence of social groups, termed the middle class. They earned their wealth through an expanding overseas trade and from the manufacture of goods such as woollen and silk textiles that were either exported or bought by the richer members of society.
- Members of the middle class were educated and believed that no group in the society should be privileged by birth. Rather, a person's social position must depend on his merit.
- These ideas envisaging a society based on freedom and equal laws and opportunities for all were put forward by philosophers such as John Locke and Jean Jacques Rousseau.
- In his *Two Treatises of Government*, Locke sought to refute the doctrine of the divine and absolute right of the monarch. Rousseau carried the idea forward, proposing a form of government based on a social contract between people and their representatives.
- In *The Spirit of the Laws*, Montesquieu proposed a division of power within the government between the legislative, the executive and the judiciary.

**Important Terms** **Bastille:** The Bastille was a fortress in Paris that was used as a state prison by the kings of France. **Bourbon family:** It is the name of the royal family of French origin, members of which became rulers of several European countries. **Bourgeoisie class:** The social class that came to own the means of production during modern industrialization and was primarily concerned with property values. **Chateau:**



A large French country house or stately residence belonging to a king or a nobleman. **Constitutional monarchy:** Form of government in which a king or queen acts as Head of State. **Clergy:** Group of persons vested with special functions in the Church. **Convent:** Building belonging to a community devoted to a religious life.

### Some important dates

**1774** Louis XVI becomes king of France, faces empty treasury and growing discontent within society of the Old Regime.

**1789** Convocation of Estates General, Third Estate forms National Assembly, the Bastille is stormed, peasant revolts in the countryside.

**1791** A constitution is framed to limit the powers of the king and to guarantee basic rights to all human beings.

**1792-93** France becomes a republic, the king is beheaded.

Overthrow of the Jacobin republic, a Directory rules France.

**1804** Napoleon becomes emperor of France, annexes large parts of Europe.

**1815** Napoleon defeated at Waterloo.

### Topic-2 The Social Forces that led to the Revolution

- Louis XVI planned to impose further taxes to be able to meet the expenses of the State.
- In France of the Old Regime, the monarch did not have the power to impose taxes according to his will alone. Rather he had to call a meeting of the Estates General to pass the proposals for new taxes.
- On 5th May 1789, Louis XVI called an assembly of the Estates General to pass proposals for new taxes. Peasants, artisans and women were denied entry to the assembly and from participating in the meeting.
- Voting in the Estates General in the past had been conducted according to the principle that each estate had one vote. But this time, members of the Third Estate demanded that voting now be conducted by the assembly as a whole, where each member would have one vote. When the king rejected this proposal, members of the Third Estate walked out of the assembly in protest.
- On 20th June 1789, the representatives of the Third Estate assembled in the hall of an indoor tennis court in the grounds of Versailles under the leadership of Mirabeau and Abbé Sieyès. They declared themselves a National Assembly and swore not to disperse till they had drafted a constitution for France that would limit the powers of the monarch.
- Because of bad harvest, increase in demand for food grains and high price of bread, people of France were becoming angry day by day. At the same time, the king ordered the troops to move into Paris. Finally, on 14th July, the agitated crowd stormed and destroyed the Bastille.
- On the night of 4th August 1789, the Assembly passed a decree abolishing the feudal system of obligations and taxes. Members of the clergy too were forced to give up their privileges. Tithes were abolished and lands owned by the Church were confiscated. As a result, the government acquired assets worth at least 2 billion livres.

### France Becomes a Constitutional Monarchy

- The National Assembly completed the draft of the Constitution in 1791. Its main objective was to limit the powers of the monarch.
- These powers were now separated and assigned to

different institutions – the legislature, executive and judiciary. This made France a constitutional monarchy.

- Not all citizens, however, had the right to vote. Only men above 25 years of age who paid taxes equal to at least 3 days of a labourer's wage were given the status of active citizens and were entitled to vote. The remaining men and all the women were classed as passive citizens.
- The Constitution began with a Declaration of the Rights of Man and Citizen. Rights such as the right to life, freedom of speech, freedom of opinion, equality before the law, were established as 'natural and inalienable rights'. These rights belonged to each human being by birth and could not be taken away.

### The Declaration of Rights of Man and Citizen

1. Men are born and remain free and equal in rights.
2. The aim of every political association is the preservation of the natural and inalienable rights of man; these are liberty, property, security and resistance to oppression.
3. The source of all sovereignty resides in the nation; no group or individual may exercise authority that does not come from the people.
4. Liberty consists of the power to do whatever is not injurious to others.
5. The law has the right to forbid only actions that are injurious to society.
6. Law is the expression of the general will. All citizens have the right to participate in its formation, personally or through their representatives. All citizens are equal before it.
7. No man may be accused, arrested or detained, except in cases determined by the law.
11. Every citizen may speak, write and print freely; he must take responsibility for the abuse of such liberty in cases determined by the law.
12. For the maintenance of the public force and for the expenses of administration a common tax is indispensable; it must be assessed equally on all citizens in proportion to their means.
17. Since property is a sacred and inviolable right, no one may be deprived of it, unless a legally established public necessity requires it. In that case a just compensation must be given in advance.

### France Abolishes Monarchy and Becomes a Republic

- Although Louis XVI had signed the Constitution, he entered into secret negotiations with the King of Prussia.
- The National Assembly voted in April 1792 to declare war against Prussia and Austria. Thousands of volunteers thronged from the provinces to join the army.
- Political clubs became an important rallying point for people who wished to discuss government policies and plan their own forms of action. The most successful of these clubs was that of the Jacobins, which got its name from the former convent of St. Jacob in Paris.
- The members of the Jacobin Club belonged mainly to the less prosperous sections of society. They included small shopkeepers, artisans such as shoemakers, pastry cooks, watch-makers, printers, as well as servants and dailywage workers. Their leader was Maximilien Robespierre.
- These Jacobins came to be known as the sans-culottes, literally meaning, those without knee breeches. Sansculottes men wore long striped trousers similar to those worn by dock workers, in addition to the red cap that symbolized liberty. Women, however, were not allowed to do so.
- On the morning of August 10, 1792, they stormed the

Palace of the Tuileries, massacred the king's guards and held the king himself as a hostage for several hours. Later, the Assembly voted to imprison the royal family. Elections were held.

- The newly-elected assembly was called the Convention. On 21st September 1792, it abolished the monarchy and declared France a republic.
- A republic is a form of government where the people elect the government including the head of the government. There is no hereditary monarchy.
- Louis XVI was sentenced to death by a court on the charge of treason. On 21st January 1793, he was executed publicly at the Place de la Concorde.

**Important Terms** **Deputy:** A parliamentary representative in many countries. **Democracy:** A form of government in which power is vested in the people, who rule either directly or through freely elected representatives. **Livre:** Currency of France from 781 to 1794. **Sceptre:** Symbol of royal power.

**Subsistence crisis:** An extreme situation where the basic means of livelihood are endangered. **Sans-culottes:** Group of people in France. **Tithes:** A tax levied by the Church, comprising one-tenth of the agricultural produce. **Treason:** The action of betraying one's country or a government.

### Topic-3 The Different Revolutionary Groups and Ideas of the Time

#### The Reign of Terror

- Robespierre's rule in France was known as the 'Reign of Terror':
- The period from 1793 to 1794 is referred to as the Reign of Terror.
- Robespierre followed a policy of severe control and punishment. All those whom he saw as being enemies of the republic for *e.g.* the ex-nobles and clergy, members of other political parties, and even members of his own party who did not agree with his methods, were arrested, imprisoned and then tried by a revolutionary tribunal.
- Robespierre's Government issued laws placing a maximum ceiling on wages and prices.
- Meat and bread were rationed.
- Peasants were forced to transport their grain to the cities and sell it at prices fixed by the government.
- The use of more expensive white flour was forbidden; all citizens were required to eat the bread, a loaf made of whole wheat.
- Equality was also sought to be practiced through forms of speech and address.
- Churches were shut down and their buildings converted into barracks or offices.
- Finally, he was convicted by a court in July 1794, arrested, and on the next day, sent to the guillotine.

#### A Directory Rules France

- The fall of the Jacobin Government allowed the wealthier middle classes to seize power.
- A new constitution was introduced which denied the vote to non-propertied sections of society.
- The political instability of the Directory paved the way for the rise of a military dictator, Napoleon Bonaparte.

#### Did Women Have a Revolution?

- From the very beginning, women were active participants in the events which brought about so many important changes in the French Society.
- Condition of women during the French Revolution:
- The women hoped that their involvement would pressurize the revolutionary government to introduce measures to improve their lives.
- Most women of the Third Estate had to work for a living. They worked as seamstresses or laundresses and sold flowers, fruits and vegetables in the market.

- They were employed as domestic servants in the houses of prosperous people.
- Most women did not have access to education or job training. Only daughters of nobles or wealthier members of the Third Estate could study at a convent.
- Working women had also to care for their families, *i.e.*, cook, fetch water, queue up for bread and look after the children.
- Their wages were lower than those of men.
- In order to discuss and voice their interests, women started their own political clubs and newspapers. **The Society of Revolutionary and the Republican Women** was the most famous club.
- Women of France demanded the right to vote, to be elected to the Assembly and to hold political offices.
- Laws introduced by the revolutionary government to improve the lives of women in France:
- Together with the creation of state schools, schooling was made compulsory for all the girls.
- Their fathers could no longer force them into marriage against their will.
- Marriage was made into a contract entered into freely and registered under civil law.
- Divorce was made legal and could be applied for by both women and men.
- Women could now train for jobs, become artists, or run small businesses.
- Women's struggle for equal political rights, however, continued. It was finally in 1946 that women in France won the right to vote.

#### The Abolition of Slavery

- One of the most revolutionary social reforms of the Jacobin regime was the abolition of slavery in the French colonies.
- A triangular slave trade began in the seventeenth century between Europe, Africa and America.
- The exploitation of slave labourers made it possible to meet the growing demand in European markets for sugar, coffee and indigo. Port cities like Bordeaux and Nantes owed their economic prosperity to the flourishing slave trade.
- Slavery was finally abolished in French colonies in 1848.

#### The Revolution and Everyday Life

- The years following 1789 in France saw many changes in the daily lives of men, women and children.
- The revolutionary governments took it upon themselves to pass laws that would translate the ideals of liberty and equality into everyday practice.
- One important law that came into effect soon after the storming of the Bastille in the summer of 1789 was the abolition of censorship.
- Effects of abolition of censorship:
- Now the Declaration of the Rights of Man and Citizen proclaimed freedom of speech and expression to be a natural right.
- Newspapers, pamphlets, books and printed pictures flooded the towns of France from where they travelled rapidly into the countryside.
- They all described and discussed the events and changes taking place in France.
- Freedom of the press also meant that opposing views of events could be expressed.
- Plays, songs and festive processions attracted large numbers of people.
- In 1804, Napoleon Bonaparte crowned himself as the Emperor of France.
- Napoleon saw his role as a modernizer of Europe. He

introduced many laws, such as

- the protection of private property, and
- a uniform system of weights and measures provided by the decimal system.
- Napoleon was finally defeated at Waterloo in 1815.
- The ideas of liberty and democratic rights were the most important legacy of the French Revolution. These ideas spread from France to the rest of Europe during the nineteenth century, where feudal systems were abolished.
- Tipu Sultan and Raja Ram Mohan Roy are the two examples of individuals who responded to the ideas coming from revolutionary France.

**Important Terms Dictator:** A ruler who wields absolute authority. **Negroes:** A term used for the indigenous people of Africa South of the Sahara. It is a derogatory term, not in common use any longer. **Feudalism:** A social system, in which the king would give a piece of land to the nobles who fought for him. While the peasants were obliged to live on their landlord's land and serve him. **Guillotine:** A device consisting of two poles and a blade with which a person is beheaded. **Jacobin Club:** A political club that existed during the French Revolution.

## Chapter 2 Socialism In Europe And The Russian Revolution

### Chapter Summary Topicwise

#### The Age of Social Change

In the previous chapter you read about the powerful ideas of freedom and equality that circulated in Europe after the French Revolution. The French Revolution opened up the possibility of creating a dramatic change in the way in which society was structured. As you have read, before the eighteenth century society was broadly divided into estates and orders and it was the aristocracy and church which controlled economic and social power. Suddenly, after the revolution, it seemed possible to change this. In many parts of the world including Europe and Asia, new ideas about individual rights and who controlled social power began to be discussed. In India, Raja Rammohan Roy and Derozio talked of the significance of the French Revolution, and many others debated the ideas of post-revolutionary Europe. The developments in the colonies, in turn, reshaped these ideas of societal change.

Not everyone in Europe, however, wanted a complete transformation of society. Responses varied from those who accepted that some change was necessary but wished for a gradual shift, to those who wanted to restructure society radically. Some were 'conservatives', others were 'liberals' or 'radicals'. What did these terms really mean in the context of the time? What separated these strands of politics and what linked them together? We must remember that these terms do not mean the same thing in all contexts or at all times.

#### Topic-1 The Age of Social Change

- The French Revolution opened up the possibility of creating a dramatic change in the way in which society was structured.

#### Liberals, Radicals and Conservatives

- One of the groups which looked to changed society was the liberals. Liberals wanted a nation which tolerated all religions.
- Liberals also opposed the uncontrolled power of dynastic rulers. They wanted to safeguard the rights of individuals against governments. They argued for a

representative, elected parliamentary government, subject to laws interpreted by a well-trained judiciary that was independent of rulers and officials.

- However, they were not democrats. They did not believe in Universal Adult Franchise.

#### Views of radicals:

- The radicals wanted a nation in which government was based on the majority of a country's population.
- Unlike liberals, they opposed the privileges of big landowners and wealthy factory owners.
- They were not against the existence of private property, but disliked concentration of property in the hands of a few.
- Conservatives were opposed to radicals and liberals.

#### Industrial Society and Social Change

- These political trends were signs of a new time. It was a time of profound social and economic changes. It was a time when the Industrial Revolution took place.
- Industrialization brought men, women and children to factories. Working hours were often long and wages were poor. Unemployment was common.
- Liberals and radicals searched for solutions to these issues. Many working men and women who wanted changes in the world rallied around liberal and radical groups and parties in the early nineteenth century.

#### The Coming of Socialism to Europe

- Perhaps one of the most far-reaching visions of how society should be structured was socialism. By the mid-nineteenth century in Europe, socialism was a well-known body of ideas that attracted widespread attention.
- Socialists were against private property and saw it as the root of all social ills of that time.
- Some socialists believed in the idea of 'cooperatives'. Robert Owen (1771-1858), a leading English manufacturer, sought to build a cooperative community called New Harmony in Indiana (USA).
- In France, for instance, Louis Blanc (1813-1882) wanted the government to encourage cooperatives and replace capitalist enterprises. These cooperatives were to be associations of people who produced goods together and divided the profits according to the work done by members.
- **Thoughts of Karl Marx (1818-1883):**
- Industrial society was capitalist. Capitalists owned the capital invested in factories and the profit of capitalists was produced by workers.
- The conditions of workers could not improve as long as this profit was accumulated by private capitalists.
- Workers had to overthrow capitalism and the rule of private property.
- Marx believed that to free themselves from capitalist exploitation, workers had to construct a radically socialist society where all properties were socially controlled. This would be a 'communist society.'
- He was convinced that workers would triumph in their conflict with capitalists. A communist society was the natural society of the future.

#### Support for Socialism

- By the 1870s, socialist ideas spread through Europe. To coordinate their efforts, socialists formed an international body namely the Second International. Workers in England and Germany began forming associations to fight for better living and working conditions.
- By 1905, socialists and trade unionists formed a Labour Party in Britain and a Socialist Party in France. However, till 1914, socialists never succeeded in forming



a government in Europe.

**Important Terms Autocracy:** A country ruled by a person who has complete power **Autonomy:** The right to govern themselves

## Topic-2 The Crises of Tzarism

• Socialists took over the government in Russia through the October Revolution of 1917. The fall of monarchy in February 1917 and the events of October are normally called the Russian Revolution.

How did this come about? What were the social and political conditions in Russia when the revolution occurred? To answer these questions, let us look at Russia a few years before the revolution.

### The Russian Empire in 1914

- In 1914, Tzar Nicholas II ruled over Russia and its empire. Besides the territory around Moscow, the Russian empire included present-day Finland, Latvia, Lithuania, Estonia, parts of Poland, Ukraine and Belarus. It stretched to the Pacific and comprised today's Central Asian states, as well as Georgia, Armenia and Azerbaijan.
- The majority religion was Russian Orthodox Christianity.



### Economy and Society

- At the beginning of the twentieth century, the vast majority of Russia's people were agriculturists. About 85 per cent of the Russian empire's population earned their living from agriculture. In the empire, cultivators produced for the market as well as for their own needs and Russia was a major exporter of grain.
  - Industry was found in pockets. Prominent industrial areas were St. Petersburg and Moscow.
  - Most industries were the private properties of industrialists. Government supervised large factories to ensure minimum wages and limited hours of work. In general, working conditions remained poor. Workers were a divided social group. Some had strong links with the villages from which they came. Others had settled in cities permanently. Workers were divided by skill. Despite divisions, workers did unite to strike work (stop work) when they disagreed with employers about dismissals or work conditions. These strikes took place frequently in the textile industry during 1896-1897, and in the metal industry during 1902.
- In the countryside, peasants cultivated most of the land. But the nobility, the crown and the Orthodox Church owned large properties. Like workers, peasants too were divided. They were also deeply religious. But except in a few cases they had no respect for the nobility. Nobles got their power and position through their services to the Tzar, not through local popularity. In Russia, peasants wanted the land of the nobles to be given to them. Frequently, they refused to pay rent and even murdered landlords. In 1902, this occurred on a

large scale in south Russia. And in 1905, such incidents took place all over Russia. Russian peasants were different from other European peasants in another way. They pooled their land together periodically and their commune (mir) divided it according to the needs of individual families.

### Socialism in Russia

- All political parties were illegal in Russia before 1914. The Russian Social Democratic Labour Party was founded in 1898 by the socialists who respected Marx's ideas. It set up a newspaper, mobilized workers and organized strikes.
- Socialists formed the Socialist Revolutionary Party in 1900. This party struggled for peasants' rights and demanded that land belonging to nobles be transferred to peasants.
- Social Democrats disagreed with Socialist Revolutionaries about peasants. Lenin felt that peasants were not one united group. Some were poor and others rich, some worked as labourers while others were capitalists who employed workers. Given this 'differentiation' within them, they could not all be part of a socialist movement.

The party was divided over the strategy of organisation. Vladimir Lenin (who led the Bolshevik group) thought that in a repressive society like Tsarist Russia the party should be disciplined and should control the number and quality of its members. Others (Mensheviks) thought that the party should be open to all (as in Germany).

### A Turbulent Time: The 1905 Revolution

- Russia was an autocracy.
- The year 1904 was a particularly bad one for Russian workers. Prices of essential goods raised so rapidly that real wages declined by 20 per cent. The membership of workers' associations rose dramatically.
- When four members of the 'Assembly of Russian Workers' which had been formed in 1904, were dismissed at the Putilov Iron Works, there was a call for industrial action.
- Over the next few days, more than 110,000 workers in St. Petersburg went on strike demanding a reduction in the working day to eight hours, an increase in wages and improvement in working conditions.
- When the procession of workers led by father Gapon reached the winter palace, it was attacked by the police and the cossacks. Over 100 workers were killed and about 300 wounded. The incident, known as Bloody Sunday, started a series of events that became known as the 1905 Revolution.
- Strikes took place all over the country and universities closed down when student bodies staged walkouts, complaining about the lack of civil liberties.
- Lawyers, doctors, engineers and other middle-class workers established the Union of Unions and demanded a constituent assembly.
- During the 1905 Revolution, the Tzar allowed the creation of an elected consultative Parliament or Duma.

**Important Terms Bolsheviks:** A faction of the Russian Social Democratic Labour Party led by Lenin based on the ideology of Marx and Engels. It seized power in the October Revolution of 1917. **Bloody Sunday:** A mass of peaceful workers were fired upon by the Russian troops when they went to the Winter Palace to present a petition to the Tzar. This incident occurred on Sunday 22nd January, 1905.

**Collective farms:** A farm or a group of farms organized as a unit and managed and worked cooperatively by a group of farmers under government supervision. **Duma:** Russian Parliament of Legislature. **Divine Right Theory:** The theory that believed that the king was the representative of the God

on Earth and no one has the right to deny him. **Exiled:** Forced to live away from one's own country. **Jadidists:** Muslim reformers in the Empire of Russia.

### Topic-3 The Nature of Social Movements Between 1905 and 1917

#### The First World War and the Russian Empire

- In 1914, war broke out between two European alliances – Germany, Austria and Turkey (the Central Powers) and France, Britain and Russia (later Italy and Romania). This was the First World War.
- In Russia, the war was initially popular and people rallied around Tzar Nicholas II.
- Defeats were shocking and demoralizing. Russia's armies lost badly in Germany and Austria between 1914 and 1916. There were over 7 million casualties by 1917.
- The war also had a severe impact on industry. Russia's own industries were few in number and the country was cut off from other suppliers of industrial goods by German control of the Baltic Sea.
- By 1916, railway lines began to break down.
- Able-bodied men were called up to the war. As a result, there was labour shortage and small workshops producing essentials were shut down.
- Large supplies of grain were sent to feed the army. For the people in the cities, bread and flour became scarce. By the winter of 1916, riots at bread shops were common.

#### The February Revolution in Petrograd

- In the winter of 1917, conditions in the capital, Petrograd, were grim.
- The layout of the city seemed to emphasize the divisions among its people. The workers' quarters and factories were located on the right bank of the River Neva. On the left bank were the fashionable areas, the Winter Palace, and official buildings, including the palace where the Duma met.
- In February 1917, food shortages were deeply felt in the workers' quarters.
- On 22<sup>nd</sup> February, a lockout took place at a factory on the right bank. The next day, workers in fifty factories called a strike in sympathy.
- In many factories, women led the way to strikes. This came to be called the 'International Women's Day.'
- Finally, on Sunday, 25<sup>th</sup> February, the government suspended the Duma.
- Demonstrators returned in force to the streets of the left bank on the 26<sup>th</sup>. On the 27<sup>th</sup>, the Police Headquarters were ransacked. The streets thronged with people raising slogans about bread, wages, better hours and democracy.
- By that evening, soldiers and striking workers had gathered to form a 'soviet' or 'council' in the same building as the Duma met. This was the Petrograd Soviet.
- Finally the Tzar abdicated on 2<sup>nd</sup> March.
- Soviet leaders and Duma leaders formed a Provisional Government to run the country.
- Petrograd had led the February Revolution that brought down the monarchy in February 1917.

#### After February

- Army officials, landowners and industrialists were influential in the Provisional Government. But the liberals as well as socialists among them worked towards an elected government.
- In April 1917, the Bolshevik leader Vladimir Lenin returned to Russia from his exile.
- Three demands of Lenin's 'April Theses':
- He felt, it was time for the Soviets to take over power.

He declared that the war be brought to a close. Land should be transferred to the peasants. Banks should be nationalized.

He also argued that the Bolshevik Party rename itself the Communist Party to indicate its new radical aims. Most others in the Bolshevik Party were initially surprised by the April Theses. They thought that the time was not yet ripe for a socialist revolution and the Provisional Government needed to be supported. But the developments of the subsequent months changed their attitude.

Through the summer the workers' movement spread. In industrial areas, factory committees were formed which began questioning the way industrialists ran their factories. Trade unions grew in number. Soldiers' committees were formed in the army. In June, about 500 Soviets sent representatives to an All Russian Congress of Soviets. As the Provisional Government saw its power reduce and Bolshevik influence grow, it decided to take stern measures against the spreading discontent. It resisted attempts by workers to run factories and began arresting leaders. Popular demonstrations staged by the Bolsheviks in July 1917 were sternly repressed. Many Bolshevik leaders had to go into hiding or flee. Meanwhile in the countryside, peasants and their Socialist Revolutionary leaders pressed for a redistribution of land. Land committees were formed to handle this. Encouraged by the Socialist Revolutionaries, peasants seized land between July and September 1917.

#### The Revolution of October 1917

- As the conflict between the Provisional Government and the Bolsheviks grew, Lenin feared the Provisional Government would set up a dictatorship.
- On 16<sup>th</sup> October 1917, Lenin persuaded the Petrograd Soviet and the Bolshevik Party to agree to a socialist seizure of power.
- A Military Revolutionary Committee was appointed by the Soviet under Leon Trotsky to organize the seizure.
- At a meeting of the All Russian Congress of Soviets in Petrograd, the majority approved the Bolshevik action.

#### What Changed after October?

- The Bolsheviks were totally opposed to private property. Most industries and banks were nationalised in November 1917.
- Land was declared social property and peasants were allowed to seize the land of the nobility.
- In cities, Bolsheviks enforced the partition of large houses according to family requirements. They banned the use of the old titles of aristocracy.
- The Bolshevik Party was renamed the Russian Communist Party (Bolshevik).
- In November 1917, the Bolsheviks conducted the elections to the Constituent Assembly, but they failed to gain majority support.
- In the years that followed, the Bolsheviks became the only party to participate in the elections to the All Russian Congress of Soviets, which became the Parliament of the country. Russia became a one-party state.

**Important Terms** **Red Army:** The army of revolutionary Russia who fought against the Tzar's army. **Romanov:** The second dynasty after Rurik which ruled over Russia until the abdication of Tzar Nicholas II in 1917.

### Topic-4 The First World War and Foundation of Soviet State

#### The Civil War

- Non-Bolshevik socialists, liberals and supporters of

autocracy condemned the Bolshevik uprising. Their leaders moved to south Russia and organised troops to fight the Bolsheviks (the 'reds').

- During 1918 and 1919, the 'greens' (Socialist Revolutionaries) and 'whites' (pro-Tzarists) controlled most of the Russian empire.
- As these troops and the Bolsheviks fought a civil war, looting, banditry and famine became common.
- By January 1920, the Bolsheviks controlled most of the former Russian empire. They succeeded due to cooperation with non-Russian nationalities and Muslim *jadidists*.

- Most non-Russian nationalities were given political autonomy in the Soviet Union (USSR) – the state the Bolsheviks created from the Russian empire in December 1922.

**Important Terms** **Monk:** A member of a religious community of men typically living under vows of poverty, chastity and obedience. **Tzar:** Emperor of Russia. **Refugee:** A person who has been forced to leave their country in order to escape war, persecution, or natural disaster.

### Topic-5 The Legacy

- A process of centralised planning was introduced. Officials assessed how the economy could work and set targets for a five-year period. On this basis, they made the Five Year Plans.
- Industrial production increased between 1929 and 1933 by 100 per cent in the case of oil, coal and steel.
- An extended schooling system developed and arrangements were made for factory workers and peasants to enter universities.
- Crèches were established in factories for the children of women workers.
- Cheap public health care was provided. Model living quarters were set up for workers.

### Stalinism and Collectivisation

- By 1927- 1928, the towns in Soviet Russia were facing an acute problem of grain supplies. The government fixed prices at which grain must be sold, but the peasants refused to sell their grain to government buyers at these prices.
- Stalin, who headed the party after the death of Lenin, introduced firm emergency measures.
- In 1928, Party members toured the grain-producing areas, supervising enforced grain collections, and raiding 'kulaks', – the name given to well-to-do peasants.
- To develop modern farms and run them along industrial lines with machinery, it was necessary to 'eliminate kulaks', take away land from peasants, and establish state-controlled large farms.
- From 1929, the Party forced all peasants to cultivate in collective farms (*kolkhoz*).
- The bulk of land and implements were transferred to the ownership of collective farms.
- Those who resisted collectivisation were severely punished. Many were deported and exiled.

### The Global Influence of the Russian Revolution and the USSR

- In many countries, communist parties were formed like the Communist Party of Great Britain.
- Many non-Russians from outside the USSR participated in the Conference of the People of the East (1920) and the Bolshevik-founded Comintern (an international union of pro-Bolshevik socialist parties).
- By the time of the outbreak of the Second World War, the USSR had given socialism a global face and world stature.

**Important Terms** **Soviet:** Council of workers. **Suffragette:**

A movement to give woman the right to vote. **Serfdom:** Russian type of feudalism under which peasants worked for the landlord in exchange for food and shelter.

## Chapter 3 Nazism And The Rise Of Hitler

### Chapter Summary Topicwise

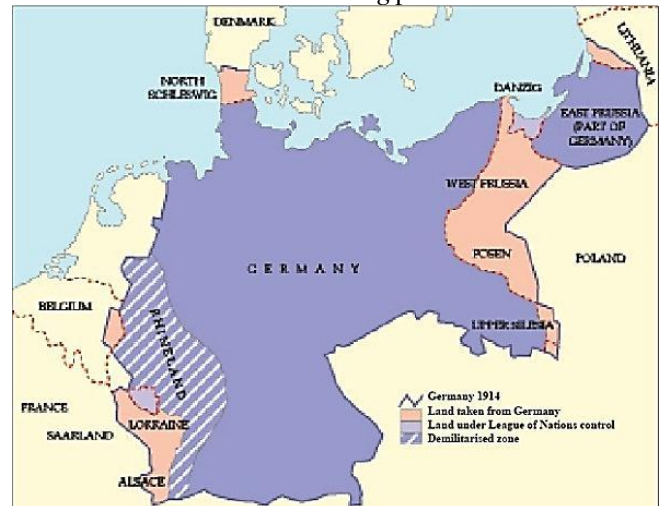
#### Topic-1 The Growth of Social Democracy and the Crises in Germany

##### Birth of the Weimar Republic

Germany, a powerful empire in the early years of the twentieth century, fought the First World War (1914-1918) alongside the Austrian empire and against the Allies (England, France and Russia.) All joined the war enthusiastically hoping to gain from a quick victory. Little did they realise that the war would stretch on, eventually draining Europe of all its resources. Germany made initial gains by occupying France and Belgium. However the Allies, strengthened by the US entry in 1917, won, defeating Germany and the Central Powers in November 1918.

The defeat of Imperial Germany and the abdication of the emperor gave an opportunity to parliamentary parties to recast German polity. A National Assembly met at Weimar and established a democratic constitution with a federal structure. Deputies were now elected to the German Parliament or Reichstag, on the basis of equal and universal votes cast by all adults including women.

This republic, however, was not received well by its own people largely because of the terms it was forced to accept after Germany's defeat at the end of the First World War. The peace treaty at Versailles with the Allies was a harsh and humiliating peace.



*Germany after the Versailles Treaty. You can see in this map the parts of the territory that Germany lost after the treaty.*

Germany lost its overseas colonies, a tenth of its population, 13 per cent of its territories, 75 per cent of its iron and 26 per cent of its coal to France, Poland, Denmark and Lithuania. The Allied Powers demilitarised Germany to weaken its power. The War Guilt Clause held Germany responsible for the war and damages the Allied countries suffered. Germany was forced to pay compensation amounting to £6 billion. The Allied armies also occupied the resource-rich Rhineland for much of the 1920s. Many Germans held the new Weimar Republic responsible for not only the defeat in the war but the disgrace at Versailles.



### The Effects of the War

- The war had a devastating impact on the entire continent both psychologically and financially.
- From a continent of creditors, Europe turned into one of debtors.
- Those who supported the Weimar Republic, mainly Socialists, Catholics and Democrats, became easy targets of attack in the conservative nationalist circles. They were mockingly called the 'November Criminals'.
- The First World War left a deep imprint on European society and polity.
- Soldiers came to be placed above civilians. Politicians and publicists laid great stress on the need for men to be aggressive, strong and masculine.

### Political Radicalism and Economic Crisis

- The birth of the Weimar Republic coincided with the revolutionary uprising of the Spartacist League on the pattern of the Bolshevik Revolution in Russia.
- Those opposed to this – such as the Socialists, Democrats and Catholics – met in Weimar to give shape to the democratic republic.
- The Weimar Republic crushed the uprising with the help of a war veterans organisation called 'the Free Corps'.

### The Years of Depression

- The years between 1924 and 1928 saw some stability. German investments and industrial recovery were totally dependent on short-term loans, largely from the USA. This support was withdrawn when the Wall Street Exchange crashed in 1929.
- On one single day, 24 October, 13 million shares were sold. This was the start of the 'Great Economic Depression'.
- Over the next three years, between 1929 and 1932, the national income of the USA fell by half. Factories shut down, exports fell, farmers were badly hit and speculators withdrew their money from the market. The effects of this recession in the US economy were felt worldwide.
- The German economy was worst hit by the economic crisis. Workers lost their jobs or were paid reduced wages. The number of unemployed touched an unprecedented 6 million.
- As jobs disappeared, the youth took to criminal activities and total despair became commonplace.
- Politically too, the Weimar Republic was fragile. The Weimar Constitution had some inherent defects, which made it unstable and vulnerable to dictatorship.
- Another defect was Article 48, which gave the President the powers to impose emergency, suspend civil rights and rule by decree.
- Yet the crisis could not be managed. People lost confidence in the democratic parliamentary system, which seemed to offer no solutions.

**Important Terms** **Wall Street Exchange:** The name of the world's biggest stock exchange located in the USA. **The Great Depression:** A worldwide economic slump lasting from 1929 to 1935. **Reichstag:** Name given to the German Parliament. **Deplete:** Empty out, reduce **Reparation:** Compensate for a wrong doing

## Topic-2 The Basis of Hitler's Rise to Power

### Hitler's Rise to Power

- This crisis in the economy, polity and society formed the background to Hitler's rise to power.
- In 1919, he joined a small group called the 'German Workers' Party. He subsequently took over the organisation and renamed it the 'National Socialist German Workers' Party. This party later came to be known as the 'Nazi Party'.

- The Nazis could not effectively mobilise popular support till the early 1930s. It was during the Great Depression that Nazism became a mass movement.
- By 1932, the Nazi Party had become the largest party with 37 per cent votes.

*Hitler effectively mobilized popular support in Germany:*

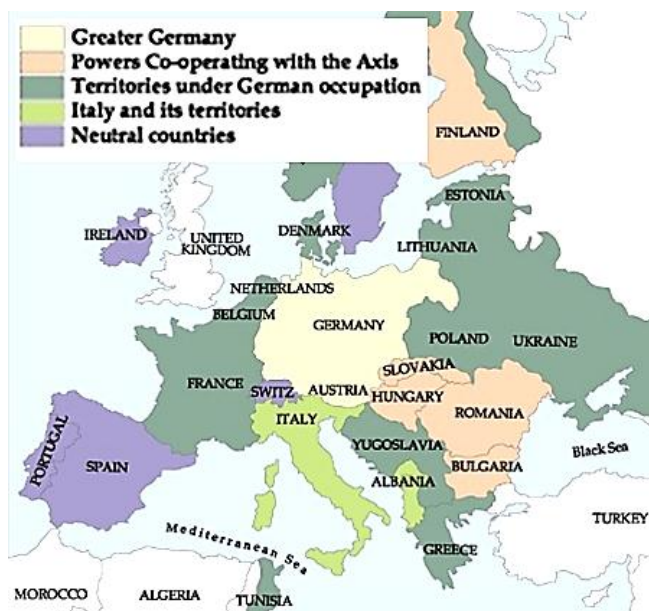
- (i) Hitler was a powerful speaker. His passion and his words moved people.
- (ii) He promised to build a strong nation.
- (iii) He promised to undo the injustice of the Versailles Treaty and restore the dignity of German people.
- (iv) He promised employment for those looking for work and a secure future for the youth.
- (v) He promised to weed out all foreign influences and resist all foreign conspiracies against Germany.
- (vi) He understood the significance of rituals and spectacle in mass mobilization. Nazis held massive rallies and public meetings to demonstrate the support for Hitler and instil a sense of unity among the people.
- (vii) The Red banners with the Swastika, the Nazi salute, and the ritualised rounds of applause after the speeches were all part of this spectacle of power.

### The Destruction of Democracy

- On 30th January 1933, President Hindenburg offered the Chancellorship, the highest position in the cabinet of ministers to Hitler.
- On 3rd March 1933, the famous 'Enabling Act' was passed. This Act established dictatorship in Germany. It gave Hitler all powers to sideline Parliament and rule by decree.
- Special surveillance and security forces were created to control and order society in ways that the Nazis wanted.
- Apart from the already existing regular police in green uniform and the SA or the 'Storm Troopers', these included the Gestapo (secret state police), the SS (the protection squads), criminal police and the Security Service (SD).

### Reconstruction

- In foreign policy also, Hitler acquired quick successes. He pulled out of the League of Nations in 1933, reoccupied the Rhineland in 1936, and integrated Austria and Germany in 1938 under the slogan, 'One people, One empire, and One leader.'
- In September 1940, a 'Tripartite Pact' was signed between Germany, Italy and Japan, strengthening Hitler's claim to international power.
- By the end of 1940, Hitler was at the pinnacle of his power.



### *Expansion of Nazi power: Europe 1942.*

**Important Terms Axis Powers:** A group of countries, namely, Italy, Germany and Japan, Bulgaria, Hungary, Romania and Yugoslavia who opposed the Allied Power. **Allied Powers:** Formed by Britain, France, Russia and USA. **Second World War:** Global war that took place from September 1939 to May 1945. About 50 million people were killed in this war. **Pearl Harbour:** Situated on the Hawaiian island of Honolulu. It was the main base of the US Pacific Fleet. **Gestapo:** The secret state police in Nazi Germany. **Holocaust:** The persecution and mass murder of Jews by German Nazis between 1933 and 1945. **Propaganda:** Specific type of message directly aimed at influencing the opinion of people through the use of posters, films and speeches. **Persecution:** Systematic and organized punishment of those belonging to a group or religion. **Jungvolk:** A separate section for Nazi boys upto 14 years of age.

### **Topic-3 The Ideology of Nazism**

#### **The Nazi Worldview**

- The crimes that Nazis committed were linked to a system of belief and a set of practices. Nazi ideology was synonymous with Hitler's world view. According to this, there was no equality between people, but only a racial hierarchy.
- In this view blond, blue-eyed, Nordic German Aryans were at the top, while Jews were located at the lowest rung. They came to be regarded as an anti-race, the arch-enemies of the Aryans.
- All other coloured people were placed in between, depending upon their external features.
- The other aspect of Hitler's ideology related to the geopolitical concept of *Lebensraum*, or living space. He believed that new territories had to be acquired for settlement. This would enhance the area of the mother country, while enabling the settlers on new lands to retain an intimate link with the place of their origin.

#### **Establishment of the Racial State**

- Once in power, the Nazis quickly began to implement their dream of creating an exclusive racial community of pure Germans by physically eliminating all those who were seen as 'undesirable' in the extended empire.
- Nazis wanted only a society of 'pure and healthy Nordic Aryans'. They alone were considered 'desirable'. This meant that even those Germans who were seen as impure or abnormal had no right to exist. Under the Euthanasia Programme, Helmut's father along with other Nazi officials had condemned to death many Germans who were considered mentally or physically unfit.

- Jews were not the only community classified as 'undesirable'. There were others. Many Gypsies and blacks living in Nazi Germany were considered as racial 'inferiors' who threatened the biological purity of the 'superior Aryan' race. They were widely persecuted. Jews remained the worst sufferers in Nazi Germany. They lived in separately marked areas called ghettos. They were often persecuted through periodic organised violence, and expulsion from the land. However, Hitler's hatred of Jews was based on pseudoscientific theories of race, which held that conversion was no solution to 'the Jewish problem'. It could be solved only through their total elimination.
- From 1933 to 1938 the Nazis terrorised, pauperised and segregated the Jews, compelling them to leave the country. The next phase, 1939-1945, aimed at concentrating them in certain areas and eventually killing them in gas chambers in Poland.

**Important Terms Allies:** The Allied Powers led by the UK and France. **Genocidal:** Killing on a large-scale leading to destruction of large sections of people. **Nazism:** A political system introduced by Hitler in Germany. **Nazi:** The short form of Nationalist Socialist German Workers Party. It was formed by Hitler in 1921.

### **Topic-4 The Impact of Nazism**

#### **Youth in Nazi Germany**

- Hitler was fanatically interested in the youth of the country. He felt that a strong Nazi society could be established only by teaching children Nazi ideology. This required a control over the child both inside and outside school.
- (i) All schools were 'cleansed' and 'purified'. This meant that teachers who were Jews or seen as politically unreliable were dismissed.
- (ii) Children were first segregated – Germans and Jews could not sit together or play together.
- (iii) Subsequently, undesirable children – Jews, the physically handicapped, Gypsies were thrown out of schools.
- (iv) 'Good German' children were subjected to a process of Nazi schooling, a prolonged period of ideological training.
- (v) School textbooks were rewritten. Racial science was introduced to justify Nazi ideas of race.
- (vi) Children were taught to be loyal and submissive, hate Jews and worship Hitler.
- (vii) Even the function of sports was to nurture a spirit of violence and aggression among children. Hitler believed that boxing could make children iron-hearted, strong and masculine.
- At 14, all boys had to join the Nazi youth organization – Hitler Youth – where they learnt to worship war, glorify aggression and violence, condemn democracy, and hate Jews, communists, Gypsies and all those categorised as 'undesirable'.
- At the age of 18, the youth had to serve in the armed forces and enter one of the Nazi organizations. The Youth League of the Nazis was founded in 1922.

#### **The Nazi Cult of Motherhood**

- Children in Nazi Germany were repeatedly told that women were radically different from men.
- While boys were taught to be aggressive, masculine and steel-hearted, girls were told that they had to become good mothers and rear pure-blooded Aryan children.
- Girls had to maintain the purity of the race, distance themselves from Jews, look after the home, and teach their children Nazi values.
- In Nazi Germany all mothers were not treated equally.

- Women who bore racially undesirable children were punished and those who produced racially desirable children were awarded.

### The Art of Propaganda

The Nazi regime used language and media with care, and often to great effect. Media was carefully used to win support for the regime and popularise its worldview. Nazi ideas were spread through visual images, films, radio, posters, catchy slogans and leaflets. In posters, groups identified as the 'enemies' of Germans were stereotyped, mocked, abused and described as evil. Socialists and liberals were represented as weak and degenerate. They were attacked as malicious foreign agents. Propaganda films were made to create hatred for Jews. The most infamous film was *The Eternal Jew*. Orthodox Jews were stereotyped and marked. They were shown with flowing beards wearing kaftans, whereas in reality it was difficult to distinguish German Jews by their outward appearance because they were a highly assimilated community.

### Ordinary People and Crimes against Humanity

- Many saw the world through Nazi eyes and spoke their mind in Nazi language. They felt hatred and anger surge inside them when they saw someone who looked like a Jew. But not every German was a Nazi.
- The Nazi killing operation was also called the holocaust. It comes from the Greek word 'Holo' and 'Kaustos', which literally means completely burnt. It is used to describe the mass murder of Jews by German Nazis between 1933 and 1945.

**Important Terms** **Gypsy:** The groups that were classified as 'gypsy' had their own community identity. Sinti and Roma were two such communities. Many of them traced their origin to India. **Jew:** One whose religion is Judaism. **Pauperised:** Reduce to absolute poverty. **Ghetto:** A quarter of a city in which Jews were formerly required to live.

## Chapter 4 Forest Society And Colonialism

### Chapter Summary Topicwise

#### Topic-1 Relationship between Forest and Livelihoods

- Forests give us a mixture of things to satisfy our different needs — fuel, fodder, leaves, trees suitable for buildings ships or railways and trees that can provide hard wood.
- Forest products like roots, fruits, tubers, herbs are used for medicinal purposes.
- Forests also provide bamboo, grass, charcoal, fruits, flowers, animals, birds and many other things.
- In the Amazon forests or in the Western Ghats, it is possible to find as many as 500 different plant species in one forest patch.
- A lot of this diversity is fast disappearing. Between 1700 and 1995, the period of industrialization, 13.9 million sq km of forest or 9.3 per cent of the world's total area was cleared for industrial uses, cultivation, pastures and fuel wood.
- **Deforestation:** Deforestation is cutting down of trees indiscriminately in a forest area. Under the colonial rule it became very systematic and extensive.
- **Why Deforestation:**
  - As population increased over the centuries and the demand for food went up, peasants extended the boundaries of cultivation by clearing forests.
  - The British encouraged the production of commercial crops like jute, sugar, wheat and cotton for their

industries as raw materials.

- The British thought that forests were unproductive land as they yielded no revenue nor agricultural produce. Cultivation was viewed as a sign of progress.
- Oak forests in England were disappearing. There was no timber supply for the ship building industry. Forest resources of India were used to make ships for the Royal Navy.
- Spread of railways required two things: Land to be cleared to lay railway tracks, wood as fuel for locomotives and for railway line sleepers.
- Large areas of natural forests were cleared for tea, coffee and rubber plantations. Thus, land was given to planters at cheap rates.

**Important Terms** **Forests:** Forests refer to natural ecosystem, consisting mainly of trees of different species and vegetation of different kinds and providing habitat to different species of animals. **Deforestation:** Clearing of trees or the act of utility down or burning the trees in the forest area for agricultural or commercial purpose is known as deforestation. **Sleepers:** Wooden planks laid across railway tracks are called sleepers. They hold the tracks in position.

#### Topic-2 Changes in Forest Societies Under Colonialism

- The British were worried that the use of forests by local people and the reckless felling of trees by traders would destroy forests.
- A German expert, Dietrich Brandis, was made the first Inspector General of Forests in India.
- Brandis realised that a proper system had to be introduced to manage the forests and people had to be trained in the science of conservation.
- So the Indian Forest Service was set up in 1864 which helped to formulate the Indian Forest Act of 1865. The Imperial Forest Research Institute was set up at Dehradun in 1906. The system they taught here was called 'scientific forestry.'
- Scientific Forestry encouraged plantation agriculture.
- The Forest Act of 1865 was amended twice in 1878 and 1927.
- The 1878 Act divided forests into three categories: Reserved, Protected and Village forests. The best forests were called 'Reserved forests.'
- **Consequences of commercial forestry under colonialism:**
  - **Shifting cultivators:** Forest management had a great impact on shifting cultivators. In shifting cultivation, parts of the forest are cut and burnt in rotation. European foresters regarded this practice as harmful for the forests. They felt that such land could not be used for growing trees for railway timber and was dangerous while being burnt as it could start a forest fire. This type of cultivation also made difficult for the government to calculate taxes.
  - **Nomadic and pastoralist communities:** Nomadic and pastoralist communities were also affected by changes in forest management. Their traditional customary grazing rights were taken away and their entry into the forests was restricted. Passes were issued to them which had details of their entry and exit into and out of the forests. The days and hours they could spend in the forest were also restricted. This was in contrast to the earlier system that allowed their unrestricted entry into the forests. Pastoralists had to lessen the number of cattle in their herd, which reduced their income. Now they were deprived of this additional income. Some pastoralists even had to change their lifestyle, leave pastoralism and had to work in mines, plantations and factories. Some were branded as the



'criminal tribes'.

• **Firms trading in timber/forest produce:** Firms trading in timber products were given the sole trading rights to trade in the forest products of particular areas. They made huge profits and became richer. The entire timber and forest trade passed on to them. They became powerful and began to cut down trees indiscriminately.

• **Plantation owners:** Plantation owners found that more and more forest land could be cleared for plantations. The British had made it very clear that their system of forestry would be scientific forestry, *i.e.*, plantations. Plantation owners began to reap profits as the British government gave larger areas of forest land to European planters.

• **Kings/British officials engaged in shikar:** The Kings/British officials engaged in 'shikar' found that now the villagers were prohibited from entering the forests. They had the forest and wild animals to themselves. Hunting animals became a big sport for them. Thus, hunting increased to such an extent that various species came to the verge of extinction.

• **Shifting Cultivation:** A practice in which parts of the forest are cut and burnt in rotation. Seeds are sown in the ashes after the first monsoon rains, and the crop is harvested by October–November every year.

**Important Terms Scientific Forestry:** A system of cutting trees controlled by the forest department in which old trees are cut and new ones planted. **Plantation:** A plantation was a large area where one type of crop was planted in straight rows for commercial purpose. **Taungya Cultivation:** A system in which local farmers were allowed to cultivate temporarily within a plantation. **Swidden Agriculture:** A traditional agricultural practice in many parts of Asia, Africa and South America where parts of forests are cut and burnt in rotation. This is also known as shifting cultivation.

### Topic-3 Case Studies of Forest Movements—Bastar in Colonial India and Java in Indonesia

#### • Location of Bastar and beliefs of the people of Bastar

- Bastar is located in the southernmost part of Chhattisgarh and on the borders of Andhra Pradesh, Odisha and Maharashtra. The central part of Bastar is situated on a plateau.
- A number of different communities live in Bastar, such as Maria and Muria Gonds, Dhurwas, Bhatras and Halbas. They speak different languages but share common customs and beliefs.
- The people of Bastar believe that each village was given its land by the Earth, and in return, they look after the earth by making some offerings at each agricultural festival. They show respect to the spirits of the river, the forest and the mountain.
- Since each village knows where its boundaries lie, the local people look after all the natural resources within that boundary. If people from a village want to take some wood from the forests of another village, they pay a small fee called 'devsari', 'dand' or 'man' in exchange.
- Some villages also protect their forests by engaging watchmen and each household contributes some grain to pay them. Every year there is one big hunt where the headmen of villages meet and discuss issues of concern, including that of forests.

#### • Causes for Bastar Rebellion

- When the Colonial Government proposed to reserve two-thirds of the forest in 1905 and stop shifting cultivation, hunting and collection of forest produce, the people of Bastar got very worried.
- Some villages were allowed to stay on in the reserved forests on the condition that they worked free for the

forest department in cutting and transporting trees, and protecting the forest from fire. So, these came to be known as *Forest Villages*.

• People of other villages were displaced without any notice or compensation. Villagers had been suffering from increased land rents and frequent demands for free labour and goods by colonial officials.

• Then the terrible famines came in 1899–1900 and again in 1907–1908. Rebellion became inevitable.

#### • Results of the Bastar Rebellion

- In a major victory for the rebels, work on reservation was temporarily suspended.
- The area to be reserved was reduced to roughly half of that planned before 1910.

#### • Causes for forest rebellion in Java

• The Dutch wanted timber from Java to build ships. The Dutch enacted forest laws in Java, restricting villagers' access to forests.

• Now, wood could only be cut for specified purposes like making river boats or constructing houses, and only from specific forests under close supervision.

• Villagers were punished for grazing cattle in young stands, transporting wood without a permit, or travelling on forest roads with horse carts or cattle.

• As in India, the need to manage forests for ship building and railways led to the introduction of a forest service by the Dutch in Java.

• The Dutch first imposed rents on land being cultivated in the forest and then exempted some villages from these rents if they worked collectively to provide free labour and buffaloes for cutting and transporting timber. This was known as the 'Blandongdiensten system'.

#### • Forest Rebellion in Java or Saminist Movement in Java

• In 1890s, Surontiko Samin a teak forest villager began questioning state ownership of the forest. He argued that the state had not created the wind, water, earth and wood, so it could not own it.

• Soon, a widespread movement developed. Amongst those who helped organize it was Samin's sons-in-law.

• By 1907, 3,000 families were following his ideas. Some of the Saminists protested by lying down on their land when the Dutch came to survey it, while others refused to pay taxes or fines or perform labour.

#### • World Wars and Deforestation

• The First World War and the Second World War had a major impact on forests. In India, working plans were abandoned at this time, and the forest department cut trees freely to meet the British war needs.

• In Java, just before the Japanese occupied the region, the Dutch followed a scorched earth policy, destroying sawmills, and burning huge piles of giant teak logs so that they would not fall into Japanese hands.

• The Japanese then exploited the forests recklessly for their own war industries, forcing forest villagers to cut down forests.

• After the war, it was difficult for the Indonesian Forest Service to get this land back. As in India, people's need for agricultural land has brought them into conflict with the forest department's desire to control the land and exclude people from it.

**Important Terms Java:** Rice producing island, where Dutch started forest management. **Kalangs of Java:** Community of skilled forest cutters and shifting cultivators.

**Blandongdiensten System:** This system was introduced by the Dutch in Java under which some villages were exempted from the taxes in terms of free labour and animals for cutting and transporting timber from forests.

## Chapter 5 Pastoralists In The Modern World

### Chapter Summary Topicwise

#### Topic-1 Pastoralism As a Way of Life

In this chapter you will read about nomadic pastoralists. Pastoralists are people who rear animals, birds and move from place to place in search of green pastures.

- They are nomadic tribes who need to move from one place to another to save their animals from adverse climatic conditions and to provide meadows or pastures regularly.
- Some of the pastoral nomads move to combine a range of activities – cultivation, trade and herding – to make their living.
- Continuous movement of nomadic tribes is useful for environment.
- Pastoral nomadism is a form of life that is perfectly suited to many hilly and dry regions of the world. Pastoral movement allows time for the natural restoration of vegetational growth.
- Pastoralists play a very important role as moving traders.
- In search of good pasture land for their cattle, the pastoralists move over long distances selling plough cattle and other goods to villagers in exchange for grain and fodder.

**Important Terms Pastoralism:** The branch of agriculture concerned with the raising of livestock. It is a form of animal husbandry where the caring, tending and extraction of animal products is done from animals such as camels, goats, cattle, yaks, llamas, and sheep. **Nomads:** People who move from one place to another to earn their living. **Bugyal:** Vast meadows in the high mountains of Garhwal and Kumaon. **Gujjar:** Pastoral agricultural tribe of Kangra, great herders of goat and sheep. **Kafila:** Groups of many people who come together for a certain journey. **Raikas:** Pastoralists of Rajasthan.

#### Topic-2 Different Forms of Pastoralism

##### Pastoral nomads and their movements

##### In the Mountains

##### The Gujjar Bakarwals of Jammu and Kashmir:

Gujjar Bakarwals of Jammu and Kashmir are great herders of goat and sheep. They are pastoral nomads who move in groups called '**Kafila**'. Their movements are governed by cold and snow. In winters, when the high mountains are covered with snow, these Gujjars move down to the low hills of the Shivalik range. On the onset of summer, when the snow melts and the mountains become lush and green, these pastoralists move back to the mountains.

- The **Gaddi Shepherds of Himachal Pradesh** have a similar cycle of movement. They also spend the winter in the lower Shivalik hills and the summers in Lahaul and Spiti.
- Further to the east, in Garhwal and Kumaon, the **Gujjar cattle herders** came down to the dry forests of the **bhabar** in the winter, and went up to the high meadows – the **bugyals** – in summer. Many of them were originally from Jammu and came to the up hills in the nineteenth century in search of good pastures.
- The **Bhotias, Sherpas and Kinnauri** follow the cyclic movement which helps them to adjust to seasonal changes and make best use of pastures.

##### On the plateaus, plains and deserts:

- **The Dhangars of Maharashtra:** The Dhangars stay in the Central Plateau of Maharashtra during the monsoon. This is a semi-arid region. By October, they

begin their movement towards Konkan. Here, their cattle help to manure the fields and hence they are welcomed by the Konkani peasants. As soon as the monsoon sets in, they retreat back to the semi-arid land of Maharashtra.

- The **Gollas** who herd cattle and the **Kurumas** and **Kurubas** who reared sheep and goat are from Karnataka and Andhra. They live near the woods and in the dry periods they move to the coastal tracts.
- The **Banjaras** of Uttar Pradesh, Punjab, Rajasthan, Madhya Pradesh and Maharashtra move to different places in search of good pastures.
- The **Raikas** of Rajasthan combine cultivation with pastoralism. When their grazing grounds become dry, they move to new and greener pastures.

#### Pastoral life was sustained by their sense of judgment:

- To know how long one must stay in an area.
- To know where they could find food and water.
- To assess and calculate the timings of their movement.
- Their ability to set up a relationship with the farmers so that the herds could graze on the harvested fields.

**Important Terms Banjaras:** Well-known group of graziers, found in the villages of Uttar Pradesh, Punjab, Rajasthan and Madhya Pradesh. **Kharif:** The summer or monsoon crop, usually harvested between September and October. **Rabi:** The winter crop, usually harvested after March. **Stubble:** Lower ends of grain stalks left in the ground after harvesting.

#### Topic-3 What Happens to Pastoralism Under Colonialism and Modern State?

##### Colonial rule and pastoral life

Under colonial rule, the life of pastoralists changed dramatically. Their grazing grounds shrank, their movements were regulated, and the revenue they had to pay increased. Their agricultural stock declined and their trades and crafts were adversely affected. How?

- First, the colonial state wanted to transform all grazing lands into cultivated farms. Land revenue was one of the main sources of its finance. By expanding cultivation it could increase its revenue collection. It could at the same time produce more jute, cotton, wheat and other agricultural produce that were required in England. To colonial officials all uncultivated land appeared to be unproductive: it produced neither revenue nor agricultural produce. It was seen as 'waste land' that needed to be brought under cultivation. From the mid-nineteenth century, Waste Land Rules were enacted in various parts of the country. By these Rules uncultivated lands were taken over and given to select individuals. So expansion of cultivation inevitably meant the decline of pastures and a problem for pastoralists.
- Second, by the mid-nineteenth century, various Forest Acts were also being enacted in the different provinces. Through these Acts some forests which produced commercially valuable timber like deodar or sal were declared 'Reserved'. No pastoralist was allowed access to these forests. Other forests were classified as 'Protected'. In these, some customary grazing rights of pastoralists were granted but their movements were severely restricted. The colonial officials believed that grazing destroyed the saplings and young shoots of trees that germinated on the forest floor. The herds trampled over the saplings and munched away the shoots. This prevented new trees from growing. These Forest Acts changed the lives of pastoralists. They were now prevented from entering many forests that had earlier provided valuable forage for their cattle. Even in the areas they were allowed entry, their

movements were regulated. They needed a permit for entry.

- Third, British officials were suspicious of nomadic people. They wanted the rural people to live in villages, in fixed places with fixed rights on particular fields. Such a population was easy to identify and control. Those who were settled were seen as peaceable and law abiding; those who were nomadic were considered to be criminal. In 1871, the colonial government in India passed the Criminal Tribes Act. By this Act many communities of craftsmen, traders and pastoralists were classified as Criminal Tribes. They were stated to be criminal by nature and birth. Once this Act came into force, these communities were expected to live only in notified village settlements. They were not allowed to move out without a permit. The village police kept a continuous watch on them.

- Fourth, to expand its revenue income, the colonial government looked for every possible source of taxation. So tax was imposed on land, on canal water, on salt, on trade goods, and even on animals. In the decades between the 1850s and 1880s the right to collect the tax was auctioned out to contractors. These contractors tried to extract as high a tax as they could to recover the money they had paid to the state and earn as much profit as they could within the year. By the 1880s the government began collecting taxes directly from the pastoralists. Each of them was given a pass. To enter a grazing tract, a cattle herder had to show the pass and pay the tax. The number of cattle heads he had and the amount of tax he paid was entered on the pass.

### How Did these changes affect the lives of pastoralists?

These measures led to a serious shortage of pastures. As pasturelands disappeared under the plough, the existing animal stock had to feed on whatever grazing land remained. This led to continuous intensive grazing of these pastures. When restrictions were imposed on pastoral movements, grazing lands came to be continuously used and the quality of pastures declined. This in turn created a further shortage of forage for animals and the deterioration of animal stock. Underfed cattle died in large numbers during scarcities and famines.



**Fig.11 – Pastoralists in India.**

### How Did the pastoralists Cope with these changes?

Pastoralists reacted to these changes in a variety of ways. Some reduced the number of cattle in their herds, since there was not enough pasture to feed large numbers. Others discovered new pastures when movement to old grazing grounds became difficult. The new political boundaries between India and Pakistan stopped their movement. So they had to find new places to go. In recent years they have been migrating to Haryana where sheep can graze on agricultural fields after the harvests are cut.

Over the years, some richer pastoralists began buying land and settling down, giving up their nomadic life. Some became settled peasants cultivating land, others took to more extensive trading. Many poor pastoralists, on the other hand, borrowed money from moneylenders to survive. At times they lost their cattle and sheep and became labourers, working on fields or in small towns.

Yet, pastoralists not only continue to survive, in many regions their numbers have expanded over recent decades. Many ecologists believe that in dry regions and in the mountains, pastoralism is still ecologically the most viable form of life.

**Important Terms** **Wasteland Rules:** Wasteland Rules were enacted in various parts of the country. By these rules, uncultivated land was taken over and given to selected individuals. **Reserved forest:** Those forests which produced commercial timber were known as reserved forests.

**Protected forest:** Those forests in which some customary pastoral rights were granted but their movements were severely restricted were known as 'protected'.

**Criminal Tribes Act:** The Criminal Tribes Act was passed in 1871 by which many nomadic communities were declared as criminal tribes.

### Topic-4 Pastoralism in Africa

- **The Maasai:** These cattle herders live primarily in East Africa. Rules, laws and regulations have changed their way of life. There are many problems which they have faced, the most prominent one being continuous loss of their grazing grounds.



- **Reasons:** In the 19<sup>th</sup> century, European imperial powers scrambled for territorial possessions in Africa. They divided the region into different colonies. The best grazing grounds were taken over by the white settlements. Grazing grounds were converted to cultivated land and national parks and *game reserves*. The Kaokoland herders have faced a similar fate.
- The British appointed chiefs to administer the affairs of the tribe. These chiefs were wealthy and lived a settled life as they had both pastoral and non-pastoral income. The poor pastoralists passed through bad times and worked as labourers. There were two important changes:
  - The traditional difference between the elders and warriors was disturbed.
  - There came to be a marked difference between the rich and poor.



- **Developments within Pastoral Societies:** Pastoralists do adapt to new times. They find new pastures, change their routes for their annual movement, reduce their cattle numbers, press for their rights, etc. It is being advocated today that pastoral nomadism is the best form of life, suited to the dry, semi-arid and mountainous regions of the world. So we see that pastoral communities in different parts of the world are affected in a variety of different ways by changes in the modern world. New laws and new borders affect the patterns of their movement. With increasing restrictions on their mobility, pastoralists find it difficult to move in search of pastures. As pasture lands disappear grazing becomes a problem, while pastures that remain deteriorate through continuous over grazing. Times of drought become times of crises, when cattle die in large numbers. Yet, pastoralists do adapt to new times. They change the paths of their annual movement, reduce their cattle numbers, press for rights to enter new areas, exert political pressure on the government for relief, subsidy and other forms of support and demand a right in the management of forests and water resources. Pastoralists are not relics of the past. They are not people who have no place in the modern world. Environmentalists and economists have increasingly come to recognise that pastoral nomadism is a form of life that is perfectly

suited to many hilly and dry regions of the world.

**Important Terms Pastoral community in Africa:** Bedouins, Berbers, Maasai, Somali, Boran and Turkana. **Maasai:** The Maasai are a nomadic people inhabiting in southern Kenya and northern Tanzania.

## Chapter 6 Peasants And Farmers

### Topic-1 The Coming of the Modern Agriculture in England

- Until the 18<sup>th</sup> century, land in England was not divided into any enclosed, private agricultural fields. The strips of land around a village were used for cultivation.
- At the onset of every year, each villager was allocated different strips of land to cultivate. This ensured that each villager got a balanced mix of both good and bad qualities of land, so that everyone was able to harvest and earn nearly equally.
- The common land that lay beyond the agricultural strips of land was open to all villagers and was used for a variety of purposes like, pastures for the cows, grazing sheep, and for collecting fuel wood, fruits and berries. The common land served as a back-up for every household in the event of a bad harvest.
- The landscape of England however changed suddenly during the late 18<sup>th</sup> and early 19<sup>th</sup> centuries. Poor peasants were no longer allowed to enter the common land and carry out their activities.

The strips of land allotted to them for cultivation were taken over by the richer landlords and surrounded by private enclosures.

- In the 16<sup>th</sup> century, as the price of wool shot up, the rich landlords increased their wool production, improved their sheep breeds and provided better feed for them, started drawing up hedges around their lands to increase their wool production.
- They drove out people who had built small cottages on the common land and prevented anyone from entering their land. The enclosure movements grew in the late 18<sup>th</sup> century, and by 1850, large areas of land were enclosed for grain production.
- Such a drastic change was stimulated by the rapid increase in population which was nearly 4 times between 1750 and 1900. This was also the age of industrialization in England.
- The demand for food grains increased to meet the needs of the large number of people who had moved to the urban areas to work in industries. France entered war with England around the late 18<sup>th</sup> century, disrupting the import of food grains from Europe.
- Taking advantage of this, the rich landlords started a frenzy of enclosing lands for grain cultivation, to make bigger profits. The early enclosures were not supported by the government or the Church. Eventually, after the mid-18<sup>th</sup> century the Parliament passed 4000 Enclosure Acts.
- The Enclosure Movement proceeded slowly till the middle of the 18<sup>th</sup> century. After the mid-18<sup>th</sup> century, it swept through the country, side, changing the English landscape forever. More and more lands began to be enclosed.
- The 16<sup>th</sup> century enclosures promoted sheep farming, whereas, the enclosures taking place in the late 18<sup>th</sup> century were for grain production. From the mid-18<sup>th</sup> century, the English population expanded rapidly. This resulted in increased demand for food grains to feed the population.

- After the 1780s, for the first time in England's history, rapid population growth was met by an increase in grain production. The increase in grain production was achieved through simple innovations such as crop rotation.

Clover and turnip was introduced and grown in abundance.

- Crop rotation and enclosures were beneficial to the rich landlords and for their grain production, but the life of the poor became more miserable. The poor were driven out from the common lands. Some areas, like Midlands, were more affected by the age of enclosures than their surrounding countries.
- People started migrating to the southern countries of England to find work as agricultural labourers. They still faced the trouble of finding secure jobs. The rich landlords started the practice of hiring labourers only during the harvest season to cut costs and increase their profits.
- The Napoleonic Wars brought further agony for the poor as the price of food grains sky rocketed during this time.

The landlords began buying new threshing machines to avoid dependence on hired labour.

- The introduction of threshing machines sparked riots across the country. The English landlords across the country received threatening letters signed by a mythical Captain Swing. Alarmed, the rich landlords feared attacks by armed bands at night, and many destroyed their own threshing machines.
- With the end of the Napoleonic Wars, food grains from Europe started flowing in and the grain prices fell, causing an Agricultural Depression. The landlords were forced to reduce the area under cultivation.

## Topic-2 Bread Basket and Dust Bowl

### • Agricultural Revolution in USA:

- Towards the end of the 18th century, a major part of the USA was still covered with natural vegetation. A large portion of the country was inhabited by the Native American Indians who depended on hunting, gathering and fishing for a livelihood. Many of them were nomads while a few were settled, cultivated corn, beans, tobacco and pumpkin for their personal use.
- The white settlers, during this time, were confined to a narrow strip of coastal belt in the east. After the American War of Independence between 1775 and 1783, the United States of America was formed and the white settlers were now keen to exploit the many opportunities that the USA presented to them.
- The Government of the USA adopted a policy of driving out Native American Indians to pave way for the white settlers to spread across the country towards the west. By the beginning of the 18th century, the white settlers settled on the Appalachian Plateau, but moved further into the Mississippi Valley between 1820 and 1850.
- Their entire landscape changed and replaced the natural wilderness with cultivated fields of corn and wheat.

This remarkable change came only after the 1860's, when the white settlers moved into the Great Plains across the Mississippi River.

- The Great Plains became major wheat producing area earning the USA the title of the 'Bread Basket of the World'.

The wheat production in the USA boomed to meet the growing needs of the urban population and the

export market.

- The development of railways supported this boom, and transporting wheat from the Central Great Plains to the ports on the east coast became easy. The big farmers, or the wheat barons as they were called, took full advantage of the First World War when the supply of wheat to Europe from Russia was cut off.

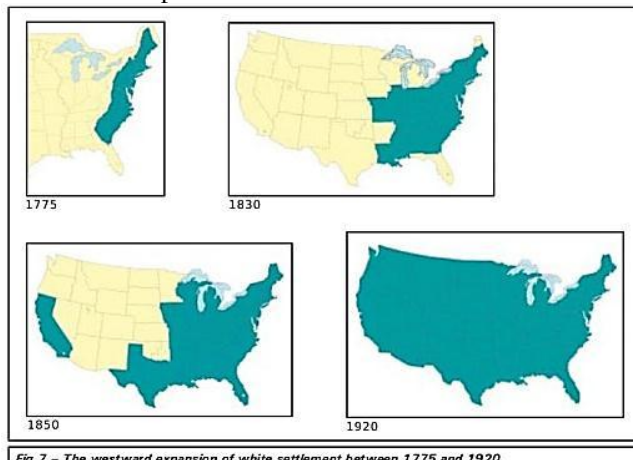


Fig.7 – The westward expansion of white settlement between 1775 and 1920.

- The situation at that time can be aptly understood through the US President Wilson's famous words when he called upon farmers to 'Plant more wheat, wheat will win the war.' From the advent of a systematic agriculture, to the wheat boom in the late 19th century, the wheat production in the USA had expanded by 65% by 1920, making USA the 'Bread Basket of the World'.

## Topic-3 Agricultural Revolution in England

- In the late 18th century, the British developed a taste for tea. They imported both silk and tea from China and paid in silver and gold coins.
- This began to affect the profits of the East India Company when tea became a popular drink in England. The British discovered that they could trade opium with China in exchange for tea. Opium, however, was being used in China only for medicinal purposes and its trade had been banned by the Confucian Rulers of China.
- The Chinese Emperors had banned all foreign traders from trading in China as they feared that the foreign traders might meddle in local politics and try to upturn power.
- The British then started an illegal trade of opium in China. They smuggled opium into China through their seaports and got it sold through some local agents.
- Opium was not grown in England but in India by the poor peasants of Bengal. The poor peasants of Bengal were far from happy to grow opium for the British.



### The triangular trade.

The British traders took opium from India to China and tea from China to England. Between India and England trade flowed both ways. By the early 19th century, exports of handlooms from India declined while the

*export of raw materials (silk and cotton) and foodgrains increased. From England, manufactured goods flowed into India leading to a decline of Indian artisanal production*

• **The Indian farmers were reluctant to grow opium because of the following reasons:** (i) The crop had to be grown on the best land, on fields that lay near the villages and were well manured. (ii) This land was usually used for growing pulses. If opium was grown on fertile and well-manured land, then pulses would have to be grown on less fertile land and yield would not be good in quality as well as quantity. (iii) The cultivation of opium was difficult and time-consuming as the plants required looking after. As a consequence, the cultivators would not have time to look after their other produce. (iv) The farmers had to pay the rent for their land to the landlords.

This rent was very high. The cultivators owned no land. (v) Finally, the price the government paid for the opium produce was very low and would provide the farmers with no profits.

- The British appointed agents who advanced money to the rich landlords, who, in turn, gave the money to the peasants as loans. The peasants were now forced to grow only opium on the land and hand over the produce to the landlord; who gave it to the British.
- The British started paying low rates to the peasants, and selling the opium to the Chinese at a higher rate,

thus increasing their profit margins. The peasants tried to resist this exploitation in many ways.

- They refused to take advances, and demanded higher rates; some refused to grow opium and started cultivating potatoes and sugarcane. There were others who sold off the opium produced by them at higher rates to travelling traders known as pykars.
- The monopoly of the British over growing opium was broken, when states not under British rule like Rajasthan, started growing opium and exporting it to China.

### Conclusion

In this chapter you saw how rural areas in different parts of the world changed in the modern period. While looking at these changes we must remember that their pattern was not the same everywhere. All sections of rural people were not affected in the same way. Some gained, others lost. Nor was the history of modernisation simply a glorious story of growth and development. It was also a story of displacements and impoverishment, ecological crises and social rebellion, colonisation and repression. We need to look at these variations and strands to understand the diverse ways in which peasants and farmers confronted the modern world.



# NCERT Class 10

## History (India and the contemporary world 2)

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 The Rise Of Nationalism In Europe

##### Topic-1 Rise of Nationalism in Europe

During the nineteenth century, nationalism emerged as a force which brought about sweeping changes in the political and mental world of Europe. The end result of these changes was the emergence of the nation-state in place of the multi-national dynastic empires of Europe. The concept and practices of a modern state, in which a centralised power exercised sovereign control over a clearly defined territory, had been developing over a long period of time in Europe. But a nation-state was one in which the majority of its citizens, and not only its rulers, came to develop a sense of common identity and shared history or descent. This commonness did not exist from time immemorial; it was forged through struggles, through the actions of leaders and the common people. This chapter will look at the diverse processes through which nation-states and nationalism came into being in nineteenth-century Europe.

- Nationalism in Europe can be traced back to the decline of Feudalism and the beginning of Renaissance. The Renaissance in Europe fostered new political ideas.
- Nationalism is a feeling of oneness with the society or the state, love and devotion for the motherland and belief in the political identity of one's country are the basic attributes of nationalism.
- Nationalism is a sense of identity with the nation. The concepts of liberty, equality, fraternity and nationalism dominated the social and political scene of Europe in the 19th century.

##### The French Revolution and the Idea of the Nation

- The first clear expression of nationalism came with the French Revolution in 1789. France, as you would remember, was a full-fledged territorial state in 1789 under the rule of an absolute monarch. The political and constitutional changes that came in the wake of the French Revolution led to the transfer of sovereignty from the monarchy to a body of French citizens. The revolution proclaimed that it was the people who would henceforth constitute the nation and shape its destiny.
- When the news of the events in France reached the different cities of Europe, students and other members of educated middle classes began setting up Jacobin clubs. Their activities and campaigns prepared the way for the French armies which moved into Holland, Belgium, Switzerland and much of Italy in the 1790s. With the outbreak of the revolutionary wars, the French armies began to carry the idea of nationalism abroad.
- Within the wide swathe of territory that came under his control, Napoleon set about introducing many of the reforms. Through a return to monarchy Napoleon had,

no doubt, destroyed democracy in France, but in the administrative field he had incorporated revolutionary principles in order to make the whole system more rational and efficient. The Civil Code of 1804 – usually known as the Napoleonic Code – did away with all privileges based on birth, established equality before the law and secured the right to property. This Code was exported to the regions under French control i.e. in the Dutch Republic, in Switzerland, in Italy and Germany. Peasants, artisans, workers and new businessmen enjoyed a new-found freedom.



Fig. 3 — Europe after the Congress of Vienna, 1815.

- Businessmen and small-scale producers of goods, in particular, began to realise that uniform laws, standardised weights and measures, and a common national currency would facilitate the movement and exchange of goods and capital from one region to another.
- However, in the areas conquered, the reactions of the local populations to French rule were mixed. Initially, in many places, the French armies were welcomed as harbingers of liberty. But the initial enthusiasm soon turned to hostility, as it became clear that the new administrative arrangements did not go hand in hand with political freedom. Increased taxation, censorship, forced conscription into the French armies required to conquer the rest of Europe, all seemed to outweigh the advantages of the administrative changes.

##### The Making of Nationalism in Europe

- If you look at the map of mid-eighteenth-century Europe you will find that there were no 'nation-states' as we know them today. Eastern and Central Europe

were under autocratic monarchies within the territories of which lived diverse peoples. They did not see themselves as sharing a collective identity or a common culture. Often, they even spoke different languages and belonged to different ethnic groups.

### **The Aristocracy and the New Middle Class**

- Socially and politically, a landed aristocracy was the dominant class on the continent. The members of this class were united by a common way of life that cut across regional divisions. They owned estates. Their families were often connected by ties of marriage. This powerful aristocracy was, however, numerically a small group. However, the majority of the population was made up of the peasantry.
- In Western and parts of Central Europe the growth of industrial production and trade meant the growth of towns and the emergence of commercial classes. Industrialisation during the nineteenth century in France & Germany led to rise of new social groups: a working-class population, and middle classes made up of industrialists, businessmen, professionals. It was among the educated, liberal middle classes that ideas of national unity following the abolition of aristocratic privileges gained popularity.

### **What did Liberal Nationalism Stand for?**

- Ideas of national unity in early-nineteenth-century Europe were closely allied to the ideology of liberalism. The term 'liberalism' derives from the Latin root *liber*, meaning free. For the new middle classes liberalism stood for freedom for the individual and equality of all before the law. Politically, it emphasised the concept of government by consent. Since the French Revolution, liberalism had stood for the end of autocracy and clerical privileges, a constitution and representative government through parliament. Nineteenth-century liberals also stressed the inviolability of private property.
- Yet, equality before the law did not necessarily stand for universal **suffrage**. The right to vote and to get elected was granted exclusively to property-owning men. Men without property and all women were excluded from political rights. Only for a brief period under the Jacobins did all adult males enjoy suffrage. However, the Napoleonic Code went back to limited suffrage and reduced women to the status of a minor, subject to the authority of fathers and husbands. Throughout the nineteenth and early twentieth centuries women and non-property men organised opposition movements demanding equal political rights.
- In the economic sphere, liberalism stood for the freedom of markets and the abolition of state-imposed restrictions on the movement of goods and capital. During the nineteenth century this was a strong demand of the emerging middle classes. Let us take the example of the German-speaking regions in the first half of the nineteenth century. Napoleon's administrative measures had created out of countless small principalities a confederation of 39 states. Each of these possessed its own currency, and weights and measures. A merchant travelling in 1833 from Hamburg to Nuremberg to sell his goods would have had to pass through 11 customs barriers and pay a customs duty of about 5 per cent at each one of them. Duties were often levied according to the weight or measurement of the goods. As each region had its own system of weights and measures, this involved time-consuming calculation.
- Such conditions were viewed as obstacles to economic exchange and growth by the new commercial classes, who argued for the creation of a unified economic

territory allowing the unhindered movement of goods, people and capital. In 1834, a customs union or *zollverein* was formed at the initiative of Prussia and joined by most of the German states. The union abolished tariff barriers and reduced the number of currencies from over thirty to two. The creation of a network of railways further stimulated mobility, harnessing economic interests to national unification. A wave of economic nationalism strengthened the wider nationalist sentiments growing at the time.

### **A New Conservatism after 1815**

- Following the defeat of Napoleon in 1815, European governments were driven by a spirit of conservatism. Conservatives believed that established, traditional institutions of state and society – like the monarchy, the Church, social hierarchies, property and the family – should be preserved. Most conservatives, however, did not propose a return to the society of pre-revolutionary days. Rather, they realised, from the changes initiated by Napoleon, that modernisation could in fact strengthen traditional institutions like the monarchy. It could make state power more effective and strong. A modern army, an efficient bureaucracy, a dynamic economy, the abolition of feudalism and serfdom could strengthen the autocratic monarchies of Europe.
- In 1815, representatives of the European powers – Britain, Russia, Prussia and Austria – who had collectively defeated Napoleon, met at Vienna to draw up a settlement for Europe. The Congress was hosted by the Austrian Chancellor Duke Metternich. The delegates drew up the Treaty of Vienna of 1815 with the object of undoing most of the changes that had come about in Europe during the Napoleonic wars. The Bourbon dynasty, which had been deposed during the French Revolution, was restored to power, and France lost the territories it had annexed under Napoleon. A series of states were set up on the boundaries of France to prevent French expansion in future.
- Thus the kingdom of the Netherlands, which included Belgium, was set up in the north and Genoa was added to Piedmont in the south. Prussia was given important new territories on its western frontiers, while Austria was given control of northern Italy. But the German confederation of 39 states that had been set up by Napoleon was left untouched. In the east, Russia was given part of Poland while Prussia was given a portion of Saxony. The main intention was to restore the monarchies that had been overthrown by Napoleon, and create a new conservative order in Europe.
- Conservative regimes set up in 1815 were autocratic. They did not tolerate criticism and dissent, and sought to curb activities that questioned the legitimacy of autocratic governments. Most of them imposed censorship laws to control what was said in newspapers, books, plays and songs and reflected the ideas of liberty and freedom associated with the French Revolution. The memory of the French Revolution nonetheless continued to inspire liberals. One of the major issues taken up by the liberal-nationalists, who criticised the new conservative order, was freedom of the press.

### **Napoleon (1769-1821) ruled France from 1799 to 1815.**

- Assumed absolute powers in 1799 by becoming the First Consul.
- Civil Code/Napoleonic Code (1804).
- Established equality before law and abolished all privileges based on birth.
- Abolished feudal system and freed peasants from serfdom.

- Taxation and censorship were imposed and military services were made mandatory.
- Conservatism was a political philosophy that stressed the importance of tradition, established institutions and customs, and preferred gradual development to quick change.
- After 1815, several liberals began working in secret societies all over Europe to propagate their views and train revolutionaries. Revolutionaries were seen as a threat to the restored monarchies, and hence, were repressed.
- Giuseppe Mazzini, a famous Italian revolutionary was born in 1807 in Genoa. He was part of a secret society called Carbonari and founded two underground societies called Young Italy in Marseilles, and Young Europe in Berne.
- In 1831, Mazzini was sent into exile for attempting a revolution in Liguria. Mazzini believed in the unification of the small kingdoms and principalities in Italy. These societies were joined by like-minded young men from Poland, France, Italy, and the German states.

**Important Terms** **Utopian vision:** Utopian vision refers to a vision of a society that is so ideal that it is unlikely to actually exist. **Absolutism:** Absolutism refers to a system of rule that has no restraints on the power exercised. **Plebiscite:** The direct vote of all the members of an electorate on an important public question such as a change in the constitution. **French Revolution:** The French Revolution in 1789 was an influential event that marked the age of revolutions in Europe. The major outcome of the revolution was the formation of a constitutional monarchy and a sizeable reduction in the royal and feudal privileges. **Nationalism:** A feeling of oneness with the society or the state, love and devotion for the motherland and belief in the political identity of one's country are the basic attributes of nationalism. **Nation-state:** A state that establishes itself as a separate political and geographical entity and functions as a complete and sovereign territorial unit. This concept emerged in 19th century Europe as a result of the growth of nationalism. **Modern State:** A state in which sovereignty is exercised by a centralized power over a specific territory and population. **Liberal Nationalism Means:** (i) Individual freedom (ii) Equality before law (iii) Government by consent (iv) Freedom of markets (v) Abolition of state-imposed restrictions on the movement of goods and capital. **Napoleonic Code:** The Civil Code of 1804 introduced by Napoleon, was known as the Napoleonic Code. This code did away with all privileges based on birth, established equality before the law and secured the right to property. **Zollverein:** A customs union formed in 1834 at the initiative of Prussia. It abolished tariff barriers and reduced the number of currencies from over thirty to two. **Habsburg Empire:** The empire that ruled Austria, Hungary including the Alpine regions of Tyrol, Austria, the Sudetenland and Bohemia. **Ottoman Empire:** A former Turkish empire ruled by the Caliph-the spiritual and temporal head of the Muslims. **Ideology:** System of ideas reflecting a particular social and political vision. **Conservatism:** It is a political and social philosophy promoting traditional social institutions in the context of culture and civilization. **Suffrage:** The right to vote in political elections.

## Topic - 2 The Age of Revolutions (1830-1848) and the Unification of Germany and Italy

### The Revolutionaries

- During the years following 1815, the fear of repression drove many liberal-nationalists underground. Secret societies sprang up in many European states to train revolutionaries and spread their ideas. To be revolutionary at this time meant a commitment to oppose monarchical forms that had been established after the Vienna Congress, and to fight for liberty and freedom. Most of these revolutionaries also saw the creation of nation-states as a necessary part of this struggle for freedom.
- One such individual was the Italian revolutionary

Giuseppe Mazzini. Born in Genoa in 1807, he became a member of the secret society of the Carbonari. Mazzini believed that Italy had to be forged into a single unified republic within a wider alliance of nations. This unification alone could be the basis of Italian liberty. Following his model, secret societies were set up in Germany, France, Switzerland and Poland. Mazzini's relentless opposition to monarchy and his vision of democratic republics frightened the conservatives. Metternich described him as 'the most dangerous enemy of our social order'.

### The Age of Revolutions: 1830-1848

- As conservative regimes tried to consolidate their power, liberalism and nationalism came to be increasingly associated with revolution in many regions of Europe. These revolutions were led by the liberal-nationalists belonging to the educated middle-class elite, among whom were professors, school-teachers, clerks and members of the commercial middle classes.
- The first upheaval took place in France in July 1830. The Bourbon kings who had been restored to power during the conservative reaction after 1815, were now overthrown by liberal revolutionaries who installed a constitutional monarchy with Louis Philippe at its head. 'When France sneezes,' Metternich once remarked, 'the rest of Europe catches cold.' The July Revolution sparked an uprising in Brussels which led to Belgium breaking away from the United Kingdom of the Netherlands.
- An event that mobilised nationalist feelings among the educated elite across Europe was the Greek war of independence. Greece had been part of the Ottoman Empire since the fifteenth century. The growth of revolutionary nationalism in Europe sparked off a struggle for independence amongst the Greeks which began in 1821. Nationalists in Greece got support from other Greeks living in exile and also from many West Europeans who had sympathies for ancient Greek culture. Poets and artists lauded Greece as the cradle of European civilisation and mobilised public opinion to support its struggle against a Muslim empire. The English poet Lord Byron organised funds and later went to fight in the war, where he died of fever in 1824. Finally, the Treaty of Constantinople of 1832 recognised Greece as an independent nation.

### The Romantic Imagination and National Feeling

- The development of nationalism did not come about only through wars and territorial expansion. Culture played an important role in creating the idea of the nation: art and poetry, stories and music helped express and shape nationalist feelings.
- Romantic artists and poets generally criticised the glorification of reason and science and focused instead on emotions, intuition and mystical feelings. Their effort was to create a sense of a shared collective heritage, a common cultural past, as the basis of a nation.
- Other Romantics such as the German philosopher Johann Gottfried Herder (1744-1803) claimed that true German culture was to be discovered among the common people – das Volk. It was through folk songs, folk poetry and folk dances that the true spirit of the nation (Volksgeist) was popularised. So collecting and recording these forms of folk culture was essential to the project of nation-building.
- The emphasis on vernacular language and the collection of local folklore was not just to recover an ancient national spirit, but also to carry the modern nationalist message to large audiences who were mostly illiterate.



### 1848: The Revolution of the Liberals

- Parallel to the revolts of the poor, unemployed and starving peasants and workers in many European countries in the year 1848, a revolution led by the educated middle classes was under way. Events of February 1848 in France had brought about the abdication of the monarch and a republic based on universal male suffrage had been proclaimed. In other parts of Europe where independent nation-states did not yet exist – such as Germany, Italy, Poland, the Austro-Hungarian Empire – men and women of the liberal middle classes combined their demands for constitutionalism with national unification. They took advantage of the growing popular unrest to push their demands for the creation of a nation-state on parliamentary principles – a constitution, freedom of the press and freedom of association.

- In the German regions a large number of political associations came together in the city of Frankfurt and decided to vote for an all-German National Assembly. On 18 May 1848, 831 elected representatives marched in a festive procession to take their places in the Frankfurt parliament convened in the Church of St Paul. They drafted a constitution for a German nation to be headed by a monarchy subject to a parliament. When the deputies offered the crown on these terms to Friedrich Wilhelm IV, King of Prussia, he rejected it and joined other monarchs to oppose the elected assembly. While the opposition of the aristocracy and military became stronger, the social basis of parliament eroded. The parliament was dominated by the middle classes who resisted the demands of workers and artisans and consequently lost their support. In the end troops were called in and the assembly was forced to disband.

- The issue of extending political rights to women was a controversial one within the liberal movement, in which large numbers of women had participated actively over the years. Women had formed their own political associations, founded newspapers and taken part in political meetings and demonstrations. Despite this they were denied suffrage rights during the election of the Assembly. When the Frankfurt parliament convened in the Church of St Paul, women were admitted only as observers to stand in the visitors' gallery.

### Topic - 3 Nation States — Unification of Italy, Germany and Britain

- After 1848, the conservatives began to use nationalist ideas to strengthen the monarchy. The unification of Italy and Germany came about through this process.

#### Unification of Germany (1866-1871)

- In 1848, middle-class Germans tried to unite the different regions of the German confederation into a nation state under an elected parliament.

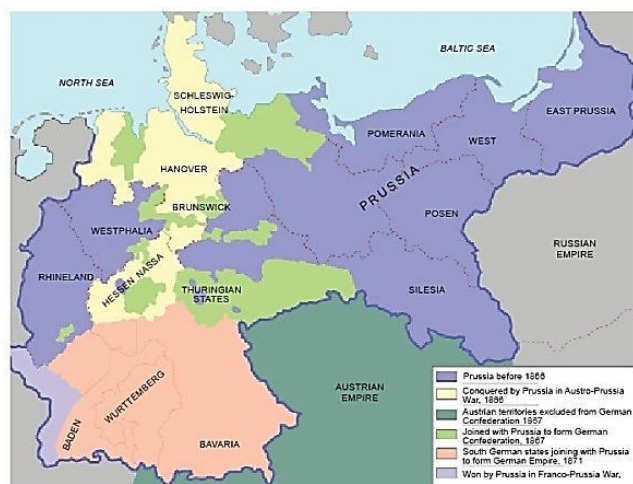


Fig. 12 — Unification of Germany (1866-71).

- In Prussia, nation building acts were repressed by the combined forces of the monarchy and the military and were supported by the landowners (Junkers).
- Prussia took over the leadership of the movement.
- Otto von Bismarck, chief minister of Prussia, was the architect of the leading role of Prussia in the process of nation-building.
- Prussia emerged victorious after fighting three wars over seven years against the combined forces of Austria, Denmark and France and the process of unification of Germany was completed.
- 18th January 1871:** The new German empire headed by the German Emperor Kaiser William I was declared in the Hall of Mirrors in the Palace of Versailles.
- The unification of Germany established Prussian dominance in Europe.

#### Unification of Italy

- Italy was divided into seven states. Only Sardinia-Piedmont was ruled by an Italian princely house.
- The North Italy was under Austrian Habsburgs. The centre part was under Pope.
- The South region was under the Bourbon Kings of Spain.
- During the 1830s, Giuseppe Mazzini formed a coherent program for uniting the Italian Republic and formed a secret society called Young Italy.
- Failure of the 1831 and 1848 revolutionary uprisings prompted King Victor Emmanuel II from Sardinia-Piedmont to unify the Italian states.
- Chief Minister of Sardinia-Piedmont, Count Cavour, led the movement for the unification of Italy.
- In the year 1859, Sardinia-Piedmont with an alliance with France defeated the Austrian forces.
- In 1860 Sardinia-Piedmont's forces marched into south Italy and the Kingdom of the Two Sicilies and drove out the Spanish rulers.
- In 1861, Victor Emmanuel was declared as the king of united Italy and Rome was declared the capital of Italy.
- Britain has a different history of how it consolidated as a nation—state without uprisings and revolutions. The British Isles was inhabited by ethnic English, Welsh, Scot or Irish. The English nation grew more in power and wealth, and it began to exert influence over the other nations of the islands.



Fig. 14(a) — Italian states before unification, 1858.



Fig. 14(b) — Italy after unification. The map shows the year in which different regions (seen in Fig 14(a)) become part of a unified Italy.

- The concept of nation states, with England as the centre, came in 1688 after the Parliament snatched power from the monarchy. In 1707, the Act of Union between England and Scotland resulted in the formation of the 'United Kingdom of Great Britain'.
- To ensure the growth of British identity, Scotland's cultural and political institutions were suppressed. The British imposed control over Ireland as well. Ireland was deeply divided into two groups, Catholics and Protestants. The English favoured the protestants, and helped them establish their dominance over a largely Catholic Ireland.
- In 1801, Ireland was forcibly incorporated into the United Kingdom after a failed Irish revolt. The symbols of new Britain were the English language, the British Flag (Union Jack), and the British national anthem (God save our Nobel King).

**Know the Personalities****Otto Von Bismarck:** Otto von Bismarck was the architect of a Prussian consolidation that was also a form of German unification. Once the empire was established, he actively and skillfully pursued pacific policies in foreign affairs, succeeding in preserving the peace in Europe for about two decades. **Kaiser William:** Wilhelm II was the last German Emperor (Kaiser) and King of Prussia, ruling the German Empire and the Kingdom of Prussia from 15 June 1888 to 9 November 1918. In newly formed Germany a lot of emphasis was placed on modernising the currency, and the banking, legal and judicial systems. **Count Camillo di Cavour:** The Chief Minister of Piedmont, Count Camillo di Cavour, helped the king in forming an alliance with France, and they defeated the Austrian forces in 1859. Camillo Paolo Filippo Giulio Benso, Count of Cavour, Isolabella and Leri, generally known as Cavour, was an Italian statesman and a leading figure in the movement toward Italian unification. **Giuseppe Garibaldi:** He was an Italian general, politician and nationalist who played a large role in the history of Italy. He has been hailed as one of the 'Fathers of the Fatherland' for his contribution to the Italian Risorgimento, which unified the fractured nation under one rule. He joined the war along with his armed volunteers called the 'Red Shirts'. In 1860, Garibaldi and his troops marched into Southern Italy and the Kingdom of Two Sicilies.

**Important Dates****1855:** The Kingdom of Sardinia participated from the sides of British and French in the Crimean War. **1858:** Cavour formed an alliance with France. **1859-1870:** Unification of Italy. **1859:** Sardinia-Piedmont with an alliance with France defeated the Austrian forces. Large number of people under the leadership of Giuseppe Garibaldi joined the movement. **1860:** Sardinia-Piedmont's forces marched into South Italy and the Kingdom of the Two Sicilies and drove out the Spanish rulers. **1861:** Victor Emmanuel II was

declared as the King of United Italy and Rome was declared the capital of Italy. **1866-1871:** Unification of Germany. **1871:** The Prussian King, William I was proclaimed the German Emperor. **1905:** Slav nationalism gathers their force in the Habsburg and Ottoman empire. **1914:** Beginning of the First World War.

## Topic-4 Visualising the Nation: Nationalism and Imperialism

### Nationalism and Imperialism:

- Through the 18th and the mid 19th century, Europe was marked by a lot of chaos and turmoil. After 1871, there was a significant change in the concept of nationalism in Europe.
- Nationalist groups in Europe had become increasingly incompatible with each other and were constantly in conflict. The major European powers, namely Russia, Germany, England and Austro-Hungary began taking advantage of nationalism in Europe, to materialise their aims for imperialism.
- The European powers sighted the much-disturbed Balkan region to fulfil their imperialist goals. The Balkan region consisted of the following countries of our times - Romania, Bulgaria, Albania, Greece, Macedonia, Croatia, Bosnia-Herzegovina, Slovenia, Serbia and Montenegro.

**Important Terms** **Ethnic:** Relates to a common racial, tribal or cultural origin or background that a community identifies with or claims. **Symbol:** A symbol is a visual image that represents something other than itself. It may be a representation using an object, picture, written word, sound or a particular mark. **Imperialism:** A policy of extending a country's power and influence through colonization, use of military force, or other means. **Allegory:** When an abstract idea (for instance greed, envy, freedom, liberty, etc.) is expressed through a person or a thing. An allegorical story has two meanings, one literal and one symbolic.

### Know the Personalities

**Marianne and Germania:** Marianne and Germania were the female allegories of France and German nations respectively. These were allegory of nation the same way as Bharat Mata, a female figure is imagined in India. The characteristics of Marianne were drawn from those of Liberty and the Republic the red cap, the tricolour and the cockade. The Statues of Marianne were made and erected at public places and picture of Marianne printed on postage stamps. Germania wears a crown of oak leaves because that tree stands for heroism. She holds a sword in her hand.

## Chapter 2 The Nationalist Movement In Indo-China

### Topic-1 French Colonialism in Indo-China

Colonialism is a process of building and maintaining of colonies in one territory by people from another territory and exploiting it economically.

- Indo-China comprises the modern countries of Vietnam, Laos and Cambodia.
- Trade had flourished in old Vietnam and it was linked with the Maritime Silk route.
- Silk route refers to an interconnected network of trade routes that connects eastern southern and western Asia with the Mediterranean world, including North Africa and Europe.





*Map of Indo-China*

- The French arrived in Vietnam in 1858 and consolidated their hold over the northern region by mid-1880. French Indo-China was formed in 1887 after defeating China, they assumed control of Tonkin and Annam.
- Writer and policy-maker, Paul Bernard believed that the prime motive behind acquiring colonies was to flourish business and make profits.
- Vietnamese economy was predominantly based on rice and rubber plantations owned by the French and elites in Vietnam. Indentured labour or labour based on contract was used in these plantations from the mid-nineteenth century.
- The French colonisation and their growing dominance in the country created tremendous unrest in Vietnam and resulted in nationalist resistance.

**Important Terms Rationalism:** The practice or principle of basing opinions and actions on reason and knowledge rather than on religious belief or emotional response.

**Individualism:** It is a moral, political or social outlook that stresses human independence and the importance of individual self-reliance and liberty. **Partial Modernisation:** It is a policy of introducing modernisation in some respects and preventing it in the other respects. If the modernisation proved dangerous for the rulers' economic exploitation, then they blocked or prevented this. **Equality Before Law:** It means all men are equal before law. There is no discrimination between rich and poor and the same law is applicable to all irrespective of their caste, religion and economic status.

**Liberalism:** Liberalism is a political philosophy or worldview founded on ideas of liberty and equality. The society has to solve all the problems to make the life for everyone happy and prosperous. **Humanism:** It means faith in human beings. It also tells us that we must have confidence on ourselves. Man has capacity to change society and make the nature better according to his requirements. **Indo-China:** The term was adopted as the name of the colony of French Indochina (today's Vietnam, Cambodia, and Laos), and the entire area of Indochina is now usually referred to as the Indochinese Peninsula or Mainland Southeast Asia.

**Important Dates** 1802: Nguyen anh becomes emperor symbolising the unification of the country under the Nguyen dynasty. 1858: The French arrived in Vietnam 1867: Cochinchina (the South) becomes a French colony. 1868: Scholar's revolt against French control 1880: Vietnam becomes French Colony 1887: Franco

Indo-China was formed 1903: Bubonic plague started in Northern part of Hanoi 1930: Ho Chi Minh forms the Vietnamese Communist Party. 1939: Hyun Phu So started HaoHoa Movement 1940: Japan occupied Vietnam 1941: Vietminh was created 1945: Fall of Japan and Vietminh declared Vietnam as independent nation 1946: The First Indo-China war began 1953: The First Indo-China war came to an end

## Topic-2 Phases of Struggle Against the French

### Civilising Mission in Vietnam – Education (Phase 1)

- The French Colonialists believed in carrying out a 'civilising mission' under the guise of modernising the colony and they used education as tool to do so. This led to an erosion of cultural beliefs, religion and tradition of Vietnam.
- The French citizens living in Vietnam called Colons felt that educated Vietnamese could replace them as teachers, shopkeepers and policemen. The elite Vietnamese were very influenced by the Chinese culture. The traditional education system of Vietnam was dismantled and a new French education system was introduced.
- The school textbooks glorified and justified the French colonial rule and portrayed Vietnamese people as primitive, and incapable of intellectual work. The Tonkin Free School, started in 1907 was to provide western education and ideas. The domination of French culture faced opposition and resistance in Vietnam.
- As the number of Vietnamese teachers in lower classes increased, they began to question the text books. In 1926, a major protest took place in the Saigon Native Girls school.
- Students came in conflict with the French as well as the elite. By the 1920's students formed various political parties such as the Party of Young Annam and published nationalist journals like the Annamese Student opposing the French domination.

### Health and Hygiene - Colony Versus Empire (Phase 2)

- The rat hunt and Bubonic plague of 1903 was a clear indication of the failure in the French civilising mission. It also presented a unique way for the Vietnamese to counter colonialism in day-to-day life. Bubonic plague is a contagious disease, which often proves fatal and can also cause an epidemic.
- In 1903, the Bubonic plague broke out in Hanoi and people manipulated the situation in a different way to exploit French colonisers.
- Modernising Hanoi, one of the main cities of Vietnam came first on their agenda. The French part of Hanoi was beautified with wide avenues and a well laid out sewer system. The native quarter was completely ignored with no modern hygienic facilities.

## Topic-3 Ideas of Phan Chu Trinh, Phan Boi Chau, Ho Chi Minh

- **Vision of Modernisation:** Two opinions held (i) Some intellectuals felt that Vietnamese traditions had to be strengthened to resist western domination. (ii) While others felt that Vietnamese had to learn from the West, while resisting its domination.
- **Phan Boi Chau** (1867-1940) formed the 'Revolutionary Society' (Duy Tan Hoi) in 1903 with Prince Cuong De as the head. He wrote a book, 'History of the Loss of Vietnam' under the influence of the Chinese reformer Liang Qichao (1873-1929). He believed that the French should be driven out first and then monarchy should be restored in Vietnam.



• **Phan Chu Trinh** (1871-1926) He was one of the greatest Vietnamese nationalists of the early 20th century. He sought to end France's brutal occupation in Vietnam. His ideas regarding the Western culture differed with Phan Boi Chau. He wanted to establish a modern Democratic Republic. He supported French ideas of Liberty Equality and Fraternity.

• **Go East Movement:** Some 300 Vietnamese students went to Japan in 1907–08 to acquire modern education. Their aim was to drive out the French and re-establish the Nguyen dynasty. They wanted Japanese help and established a 'Restoration Society' in Tokyo. But after 1908, the Japanese closed the society, and sent many of them, including Phan Boi Chau to exile in China and Thailand.

• When Sun Yat Sen overthrew monarchy in China in 1911, a new association – Association for Restoration of Vietnam was formed. Their objective was to have a Democratic Republic and a Constitutional Monarchy in Vietnam.

**Important Terms Concentration Camps:** They were the jails meant for those who opposed the French rule. The prisoners were made to do a lot of hard work. **Go East Movement:** Nearly 300 students of Vietnam went to Japan to get modern education. Their real aim was to overthrow the French rule with the help of Japan. They set up Restoration Society in Tokyo. **The Great Depression:** It started in 1930 in USA. It is a situation in which the production was more than the demand. Therefore goods remained unsold and factories closed down. People lost their jobs. **Electrical Fuses of Vietnam:** Vietnamese provinces of Nghe An and Ha Tinh were called Electrical Fuses. They were the first provinces to start revolts.

Know the Personalities **Prince Cuong De:** He belonged to the Vietnamese royal family which had no power. He became the head of the Revolutionary Society founded by Phan Boi Chau. **Liang Qichao:** He was a Chinese reformer. His thoughts and ideas influenced Phan Boi Chau. **Sun Yat sen:** He was a Chinese nationalist. In 1911, he overthrew the Chinese monarchy and established a republic.

**Important Dates 1903:** The Revolutionary Society was formed by Phan Boi Chau **1911:** Association for Restoration of Vietnam was formed **1974:** Paris Peace Treaty **1975 (April 30):** NLF troops enter Saigon **1976:** The Socialist Republic of Vietnam is proclaimed.

#### Topic-4 America and the Vietnam War

##### The entry of the US into the Vietnam War

• Communism was on a rise in North Vietnam under the leadership of Ho Chi Minh. North Vietnam helped the NLF of South Vietnam to overthrow the dictatorial rule of Ngo Dinh Diem. They also decided to overlook the terms of the Geneva Conference and unify Vietnam.

• The spread of Communism was viewed as a potential threat by the capitalist nations especially the U.S.. U.S. sent their troops to South Vietnam to intervene and this was the start of the catastrophic U.S. Vietnam war.

• US entry into the war marked a new phase that proved costly to the Vietnamese as well as to the Americans.

From 1965 to 1972, over 3,403,100 US services personnel served in Vietnam (7,484 were women).

• Both of them faced a terrible loss of life and property. A major role was played by the US media and films, in both supporting as well as criticising the war.

• Chemical weapons like B52s Agent Orange, Napalm and Phosphorous Bombs were used which wiped out villages and razed down forests. The U.S. decision to intervene in Vietnam was criticised vehemently back home.

• Despite the advanced technology and excellent

medical facilities, the U.S. suffered a lot of casualties in the war. The U.S. had completely underestimated the strength and determination of nationalist Vietnamese people.

• The Vietnamese used their limited resources to gain maximum advantage over the U.S. The Ho Chi Minh Trail is a perfect example of Vietnamese enterprise. This trail was a massive network of footpaths and roads, used to transport men and materials from North to South Vietnam.

• The U.S. regularly bombed the trail to disrupt supplies, but the trail was managed efficiently and it was rebuilt quickly. Vietnam bravely combated the U.S. attack and got freedom in 1975.



Fig.14– The Ho Chi Minh trail. Notice how the trail moved through Laos and Cambodia.

**Important Terms Vietnam Cong san Dang:** [Viet Cong] It was the Communist Party of Vietnam founded by Ho Chi Minh in 1930. **Vietminh:** The league for the independence of Vietnam was formed by Ho Chi Minh to fight for freedom. It was a people's army. It fought against the Japanese invaders. It defeated French in the battle of Dien Bien Phu. **Battle of Dien Bien Phu:** It was a battle fought between the French and the Vietminh in 1954. The French were defeated in this battle. **Geneva Conference of 1954:** It was organized by the UN. It was decided to divide Vietnam into two parts. The North under Communist rule and South under Bao Dai [puppet of the USA] **National Liberation Front [NLF]:** NLF was formed by the people of South Vietnam. They wanted to overthrow the American supported government and unite with North Vietnam. It fought against the American forces along with the North Vietnamese troops. **Communism:** It is Scientific Socialism. It is an ideology based on human equality. It supports a worker's government. **Domino effect:** USA believed that if Vietnam becomes a Communist country it would have some effect on the neighbouring countries too and they would all become Communist. The policy of Domino effect grew out of USA's fear for the spread of Communism. **Ho Chi Minh's Trail:** It was a network of roads and footpaths which connected North Vietnam with South Vietnam.

**Know the Personalities Ho Chi Minh:** Ho Chi Minh (originally Nguyen That Thanh) was the founder of the Communist Party of Vietnam in 1930. He was also Prime Minister (1945–55) and President (1945–69) of the Democratic Republic of Vietnam (North Vietnam).

**Dinh Diem:** He was a South Vietnamese politician. In October 1955, after winning a heavily rigged referendum, he deposed Bao Dai and established the first Republic of Vietnam (RVN), with himself as President. He was named Prime Minister of the State of Vietnam by Head of State Bao Dai in 1954. **Nhat Linh:** He was a famous Vietnamese novelist. He wrote the most famous novel of the Self-Reliance Literary Movement (Tu Luc Van Doan), called Break (Doan Tuyet). A love story, it tells of a young woman ground between family obligations and her desire for life on her own terms. It took the reading public of colonial Viet Nam by storm, both reflecting and influencing the way young men and women in the cities actually fell in love and got married. **Trieu Au:** She is also known as the Joan of Arc of Vietnam. In 248 A.D. Trieu Au set up her own resistance government and organized thousands of Vietnamese people who flocked to her into a formal army to combat China. She dressed herself in golden armor and rode her war elephant into battle at the head of her ragged but defiant army. She lived in the forest and led the war. She was defeated in the war and thus ended her life by drowning in the river instead of surrendering to the Chinese army. **Nguyen ThiXuan:** Her heroism relates to her key role in the supplying of Vietnamese defence. She had shot down an attacking American jet with just 20 bullets.

## Chapter 3 Nationalism In India

### Topic-1 The First World War, Khilafat and Non-Cooperation Movement

- **Effects of First World War:** The First World War led to a huge increase in defence expenditure. This was financed by war loans and by increasing taxes. Custom duties were raised and income tax was introduced to raise extra revenue. Prices of items increased during the war years. The prices doubled between 1913 and 1918. The common people were the worst sufferers because of price rise. Forced recruitment of rural people in the army was another cause of widespread anger among people.
- Crop failure in many parts of India resulted in acute shortage of foods. Influenza epidemic further aggravated the problem. According to 1921 census, about 12 to 13 million people died because of famines and epidemic.
- **The Idea of Satyagraha**
- Mahatma Gandhi returned to India in January, 1915. His heroic fight for the Indians in South Africa was wellknown. His novel method of mass agitation known as Satyagraha had yielded good results.
- The idea of Satyagraha emphasized the power of truth and the need to search for truth. In 1916, Gandhi travelled to Champaran in Bihar to inspire the peasants to struggle against the oppressive plantation system.
- Mahatma Gandhi advocated a novel method Delhi of mass agitation; called Satyagraha. This method Delhi was based on the idea that if someone is fighting for a true cause, there is no need to take recourse to physical force to fight the oppressor. Gandhiji believed that a satyagrahi could win a battle through non-violence, *i.e.*, without being aggressive or revengeful.
- **Some early Satyagraha movements organized by Gandhiji:**
- Peasants' Movement in Champaran (Bihar) in 1916.

- Peasants' Movement in Kheda district (Gujarat) in 1917.
- Mill workers' Movement in Ahmedabad in 1918.
- **The Rowlatt Act (1919):**
- The Rowlatt Act was passed by the Imperial Legislative Council in 1919. The Indian members did not support the Act, but it was passed; nevertheless. The Act gave enormous powers to the government to repress political activities. It allowed detention of political prisoners without trial for two years.
- On 6th April, 1919; Gandhiji launched a nationwide Satyagraha against the proposed Rowlatt Act. The call of strike on 6th April got huge response. People came out in support in various cities, shops were shut down and workers in railway workshops went on strike. The British administration decided to clamp down on the nationalists. Several local leaders were arrested. Mahatma Gandhi was barred from entering Delhi.
- **Jallianwalla Bagh:**
- On 10th April 1919; in Amritsar; the police fired upon a peaceful procession. This provoked widespread attacks on government establishments. Martial law was imposed in Amritsar and the command of the area was given to General Dyer.
- The infamous Jallianwalla Bagh Massacre took place on 13th April; the day on which Baisakhi is celebrated in Punjab. A crowd of villagers came to participate in a fair in Jallianwalla Bagh. This was enclosed from all sides with narrow entry points.
- General Dyer blocked the exit points and opened fire on the crowd. Hundreds of people were killed in the incident. Public reaction to the incident took a violent turn in many north Indian towns. The government was quite brutal in its response. Things took highly violent turn. Mahatma Gandhi called off the movement as he did not want violence to continue.
- **Khilafat Movement:** The Khilafat issue gave Mahatma Gandhi an opportunity to bring the Hindus and Muslims on a common platform. The Ottoman Turkey was badly defeated in the First World War. There were rumours about a harsh peace treaty likely to be imposed on the Ottoman emperor; who was the spiritual head of the Islamic world (the Khalifa). A Khilafat committee was formed in Bombay in March 1919 to defend the Khalifa. This committee had leaders like the brothers Muhammad Ali and Shaukat Ali. They also wanted Mahatma Gandhi to take up the cause to build a united mass action. At the Calcutta session of the Congress in September 1920, the resolution was passed to launch a Non-Cooperation movement in support of Khilafat and also for swaraj.
- **Non-Cooperation Movement:** In his famous book Hind Swaraj (1909), Mahatma Gandhi declared that British rule was established in India with the cooperation of Indians, and had survived only because of this cooperation. If Indians refused to cooperate, British rule in India would collapse within a year, and swaraj would come. Gandhiji believed that if Indians begin to refuse to cooperate, the British rulers will have no other way than to leave India.
- **Some of the proposals of Non-Cooperation Movement:**
- Surrender the titles which were awarded by the British government.
- Boycott of civil services, army, police, courts, legislative councils and schools.
- Boycott of foreign goods.
- Launch full civil disobedience campaign, if the government persisted with repressive measures.
- **Differing Strands within the Movement:** The Non-



Cooperation-Khilafat Movement began in January 1921. Various social groups participated in this movement, each with its own specific aspiration. All of them responded to the call of Swaraj, but the term meant different things to different people.

- **Awadh:** The peasants' movement in Awadh was led by Baba Ramchandra. He was a sanyasi who had earlier worked in Fiji as an indentured labourer. The peasants were against the high rents and many other cesses, which were demanded by talukdars and landlords. The peasants demanded reduction of revenue, abolition of begar, and social boycott of oppressive landlords.
- **Tribal Peasants:** Tribal peasants gave their own interpretation of Mahatma Gandhi and the idea of swaraj. The tribals were prevented from entering the forests to graze cattle, or to collect fruits and firewood. The new forest laws were a threat to their livelihoods. The government forced them to do begar on road construction.

- Many rebels from the tribal areas became non-violent and often carried guerrilla warfare against the British officials.

- **Swaraj in the Plantations:** The plantation workers were not permitted to leave the tea gardens without permission; as per the Indian Emigration Act of 1859. When the news of Non-Cooperation Movement spread to the plantations, many workers began to defy the authorities. They left plantations and headed towards their homes. But they got stranded on the way because of a railway and steamer strike. They were caught by the police and brutally beaten up.

**Important Terms Nationalism:** It is a system created by people who believe their nation is superior to all others.

**Satyagraha:** The policy of passive political resistance inaugurated by Mohandas Gandhi during his stay in South Africa. It is based on the ideals of truth and non-violence.

**Khalifa:** The spiritual head of the Islamic World. **Begar:** Labour that villagers were forced to contribute without any payment. **Forced Recruitment:** A process by which the colonial state forced people to join the army. **Rowlatt Act:** It was an Act which gave the government enormous power to repress political activities. It allowed that government could arrest anybody without a trial for two years. **Jallianwala Bagh Massacre:** The Jallianwala Bagh massacre, also known as the Amritsar massacre, took place on 13 April 1919 when troops of the British Indian Army under the command of Colonel Reginald Dyer fired rifles into a crowd of Baishakhi pilgrims, who had gathered in Jallianwala Bagh, Amritsar, Punjab. **Non-Cooperation Movement:** Began in January 1921. The main aim of this movement was not to cooperate with the British made goods. It included surrendering of government titles, boycott of civil services, army, police, courts and legislative councils, school, and foreign goods; and a full civil disobedience campaign would be launched. **Swadeshi:** The Swadeshi movement involved boycotting British products and the revival of domestic made products and production technique. **Boycott:** A boycott is a form of consumer activism involving the act of voluntarily abstaining from using, buying or dealing with a person, organization or country as an expression of protest usually for political reason. **Picket:** A form of demonstration or protest by which people block the entrance to a shop, factory or office.

**Important Dates 1885:** The first meeting of the Indian National Congress in Bombay. **1905:** The Partition of Bengal officially came into existence. **1906:** Formation of the Muslim League. **1913 - 1918:** The war prices increased in double. **1914 - 1918:** The First World War. **1917:** Mahatma Gandhi organized Satyagraha Movement in Kheda District (Gujarat). **1918:** Mahatma Gandhi organized Satyagraha Movement in Ahmedabad. **1919:** Rowlatt Act was Passed (It gave the government enormous power to repress political activities, and

allowed detention of political prisoners without trial for two years). **10th April, 1919:** The police in Amritsar fired upon a peaceful procession. Martial law was imposed. **1918-1919 & 1920-1921:** Crop failure. **March, 1919:** Khilafat Committee founded in Bombay. **13th April, 1919:** Jallianwala Bagh Massacre took place. **September, 1920:** Congress Session in Calcutta—Decided to start a Non-Cooperation Movement in support of Khilafat as well as for Swaraj. **1920:** Mahatma Gandhi leads the Congress; Non-Cooperation Movement launched. **December, 1920:** Congress Session at Nagpur—A compromise was worked out and the Non-cooperation programme was adopted. **1921:** Famines and the epidemic.

## Topic-2 Civil Disobedience Movement

- **Simon Commission** The British government constituted a Statutory Commission under Sir John Simon. The Commission was made to look into the functioning of the constitutional system in India and suggest changes. But since all the members in the Commission were British, the Indian leaders opposed the Commission. The Simon Commission arrived in India in 1928. It was greeted with the slogan 'Go back Simon'. All parties joined the protest. In October 1929, Lord Irwin announced a vague offer of 'dominion status' for India but its timing was not specified. He also offered to hold a Round Table Conference to discuss the future Constitution.

- **Salt March (Beginning of Civil Disobedience Movement)** • Mahatma Gandhi believed that salt could be a powerful symbol to unite the whole nation. Most of the people; including the British scoffed at the idea. Abolition of the salt tax was among many demands which were raised by Gandhiji through a letter to Viceroy Irwin. • The Salt March or Dandi March was started by Gandhiji on 12th March 1930. He was accompanied by 78 volunteers. They walked for 24 days to cover a distance of 240 miles from Sabarmati to Dandi. Many more joined them in the way. On 6th April 1930, Gandhiji ceremonially violated the law by taking a fistful of salt. • The Salt March marked the beginning of the Civil Disobedience Movement. Thousands of people broke the salt law in different parts of country. People demonstrated in front of government salt factories. Foreign cloth was boycotted. Peasants refused to pay revenue. Village officials resigned. Tribal people violated forest laws.

- **Response of British Rulers:** The colonial government began to arrest the Congress leaders. This led to violent clashes in many places. Mahatma Gandhi was arrested about a month later. People began to attack the symbols of British rule; such as police posts, municipal buildings, law courts and railway stations. The government's repression was quite brutal. Even women and children were beaten up. About 100,000 people were arrested.

- **Round Table Conference:** When things began to take a violent turn, Mahatma Gandhi called off the movement. He signed a pact with Irwin on 5th March 1931. This was called the Gandhi-Irwin Pact. As per the Pact, Gandhiji agreed to participate in the Round Table Conference in London. In lieu of that, the government agreed to release the political prisoners. Gandhiji went to London in December 1931. The negotiations broke down and Gandhiji put in jail. Congress had been declared illegal. Many measures were taken to prevent meetings, demonstrations and boycotts. Mahatma Gandhi relaunched the Civil Disobedience Movement.



By 1934, the movement had lost its momentum.

**Important Terms Civil Disobedience:** During Civil Disobedience Movement people were asked not only to refuse cooperation with the British but also to break the colonial laws. **Swaraj:** "Swaraj" means freedom or self-rule. In 1920, "Swaraj" meant "Self-Government" within the empire if possible and outside if necessary. **Simon Commission:** The New Tory government in Britain constituted a statutory Commission under Sir John Simon. The Commission was sent to India to look into the functioning of the constitutional system in India and suggest changes. It arrived in India in 1928.

**Salt Law:** Salt is consumed by both the poor and the rich, and is one of the most essential items of foods everywhere in the world. The British government had the monopoly on the production of salt in India. By imposing a 'salt tax' the government hit both the rich and the poor, specially the poor. Gandhiji thought it was the most repressive Act of the British government and chose to defy it by breaking the "Salt Law".

**Gandhi Irwin Pact:** When British government responded with a policy of brutal repression against the Civil Disobedience Movement, Mahatma Gandhiji decided to call off the movement. He entered into a pact with Lord Irwin on 5th March 1931. Under this pact, Gandhiji consented to participate in a Round Table Conference in London.

**Important Dates 1920:** The peasant movement in Awadh spread, but the Congress Leader were not happy with them. **1921:** A militant Guerrilla movement spread in the Gudam Hills of Andhra Pradesh. Movement started by Alluri Sitaram Raju. **1921-1922:** The Import of foreign cloth halved. June, 1920 Jawaharlal Nehru going around the village in Awadh. **February, 1922:** Mahatma Gandhi decided to Withdraw Non-Cooperation Movement. Establishment of Swaraj Party by Motilal Nehru and C.R. Dass. **1924:** Raju was captured and executed. **1927:** The Federation of the Indian Chamber of Commerce and Industries (FICCI). **1928:** Simon Commission arrived in India. **1928:** Foundation of the Hindustan Socialist Republican Army (HSRA). **October, 1929:** A vague offer of 'Dominion Status' for India offered by Lord Irwin. **October, 1929:** Oudh Kisan Sabha was set up headed by J.L. Nehru. **December, 1929:** Lahore Session of the Congress- Demand for Purna Swaraj. **January 26, 1930:** Celebrated as the Independence day. **January 31, 1930:** Gandhiji sent a letter to Viceroy Irwin stating 11 demands. **April, 1930:** Abdul Ghaffar Khan was arrested. **April 6, 1930:** The salt march reached Dandi, Gandhiji violated the Salt Law. **1930:** Civil Disobedience Movement continues; Salt Satyagraha: Gandhi's Dandi March; First Round Table Conference. **March 5, 1931:** Gandhi Irwin Pact was signed. **December, 1931:** Gandhiji went for Second Round Table Conference. **1931:** Second Round Table Conference; Irwin-Gandhi Pact; Census of India. **1932:** Suppression of the Congress movement; Third Round Table Conference. **September, 1932:** Poona Pact between Gandhiji and Dr. B. R. Ambedkar. **1934:** Civil Disobedience Movement called off. **1934:** Civil Disobedience Movement lost its momentum. **1935:** The Government of India Act receives Royal Assent.

### Topic-3 People's Participation in the Movement and the Sense of Collective Belonging

• **Farmers:** For the farmers, the fight for swaraj was a struggle against high revenues. When the movement was called off in 1931; without the revenue rates being revised; the farmers were highly disappointed. Many of them refused to participate when the movement was re-launched in 1932. The small tenants just wanted the unpaid rent to the landlord to be remitted. They often joined the radical movements which were led by Socialists and Communists. Congress did not want to

alienate the rich landlords and hence, the relationship between the poor peasants and Congress was uncertain.

• **Businessmen:** The Indian merchants and industrialists could grow their business during the First World War. They were against those colonial policies which restricted their business activities. They wanted protection against imports and a Rupee-Sterling Foreign Exchange ratio which would discourage imports. The Indian Industrial and Commercial Congress was formed in 1920 and the Federation of the Indian Chamber of Commerce and Industries (FICCI) was formed in 1927. These were the results of attempts to bring the common business interests on a common platform. For the businessmen, Swaraj meant an end to oppressive colonial policies. They wanted an environment which could allow the business to flourish. They were apprehensive of militant activities and of growing influence of socialism among the younger members of the Congress.

• **Industrial Workers:** The industrial workers showed lukewarm response to the Civil Disobedience Movement. Since industrialists were closer to the Congress, workers kept a distance from the movement. But some workers selectively participated in the Movement. Congress did not want to alienate the industrialists and hence preferred to keep the workers' demands at bay.

• **Women's Participation:** Women also participated in the Civil Disobedience Movement in large numbers. However, most of the women were from high-caste families in the urban areas and from rich peasant households in the rural areas. But for a long time, the Congress was reluctant to give any position of authority to women within the organization. The Congress was just keen on the symbolic presence of women.

### The Sense of Collective Belonging

• Nationalist Movement Spreads when people belonging to different regions and communities begin to develop a sense of collective belongingness. The identity of a nation is most often symbolized in a figure or image.

• This image of Bharat Mata was first created by Bankim Chandra Chattopadhyay in 1870 when he wrote 'Vande Mataram' for our motherland. Indian folk songs and folk sung by bards played an important role in making the idea of nationalism. In Bengal, Rabindranath Tagore and in Madras, Natesa, Sastri collection of folk tales and songs, this led the movement for folk revival.

• During the Swadeshi Movement, a tri-color (red, green and yellow) flag was designed in Bengal. It had eight lotuses representing eight provinces and a crescent moon representing Hindus and Muslims.

• Means of creating a feeling of nationalism was through reinterpretation of history. The nationalist writers urged the readers to take pride in India's great achievements in the past and struggle to change the miserable conditions of life under British rule.

**Important Terms Folklores:** The traditional beliefs, customs and stories of a community that are passed through the generations by word of mouth. Many nationalist leaders took help of folk tales to spread the idea of nationalism. It was believed that the folk tales revealed the true picture of traditional culture. **Reinterpretation of History:** Many Indians felt that the British had given a different interpretation of the Indian history. They felt that it was important to interpret the history from an Indian perspective. They wanted to glorify the rich past of India so that the Indians could feel proud of their history.

**Important Dates • 1930:** Dr. B. R. Ambedkar established Depressed Classes Association. • **1937:** Election held for Provincial Assemblies. • **1939:**

**Outbreak of the Second World War.****Conclusion**

A growing anger against the colonial government was thus bringing together various groups and classes of Indians into a common struggle for freedom in the first half of the twentieth century. The Congress under the leadership of Mahatma Gandhi tried to channel people's grievances into organised movements for independence. Through such movements the nationalists tried to forge a national unity. But as we have seen, diverse groups and classes participated in these movements with varied aspirations and expectations. As their grievances were wide-ranging, freedom from colonial rule also meant different things to different people. The Congress continuously attempted to resolve differences, and ensure that the demands of one group did not alienate another. This is precisely why the unity within the movement often broke down. The high points of Congress activity and nationalist unity were followed by phases of disunity and inner conflict between groups. In other words, what was emerging was a nation with many voices wanting freedom from colonial rule.

## Chapter 4

### The Making Of A Global World

#### Topic-1 The Pre-modern World and the Nineteenth Century (Global Economy and Colonialism)

- Globalisation' refers to an economic system that has emerged since the last 50 years.
- From ancient times, travellers, traders, priests and pilgrims travelled vast distances for knowledge, opportunity and spiritual fulfilment, or to escape persecution.
- The silk routes are a good example of pre-modern trade and cultural links between distant parts of the world.
- The name 'silk routes' points to the importance of West-bound Chinese silk cargoes along this route.
- Trade and cultural exchange always went hand in hand.
- Traders and travellers introduced new crops to the lands they travelled.
- Europe's poor began to eat better and live longer with the introduction of the humble potato.
- Ireland's poorest peasants became so dependent on potatoes that when disease destroyed the potato crop in the mid-1840s, hundreds of thousands died of starvation.
- European sailors found a sea route to Asia and also successfully crossed the western ocean to America.
- Precious metals, particularly silver, from mines located in present day Peru and Mexico also enhanced Europe's wealth and financed its trade with Asia.
- The Portuguese and Spanish conquest and colonisation of America was decisively under way by the mid-sixteenth century.
- The most powerful weapon of the Spanish conquerors was the germs such as those of smallpox that they carried on their person.
- Due to their long isolation, America's original inhabitants had no immunity against these diseases that came from Europe. Smallpox in particular proved to be a deadly killer.
- Until the 19th century, poverty and hunger were common in Europe. Cities were crowded and deadly diseases were widespread.
- In the 18th century, China and India were among the world's richest countries. They were also pre-eminent in Asian trade.
- However, from the 15th century, China is said to have restricted overseas contacts and retreated into isolation.
- China's reduced role and the rising importance of the Americas gradually moved the centre of world trade.
- Europe now emerged as the centre of world trade.
- Economic, political, social, cultural and technological factors interacted in complex ways to transform societies and reshape external relations.
- Economists identify three types of movement or 'flows' within international economic exchanges.
- The flow of trade
- The flow of labour
- The movement of capital
- Due to increase in population from the late 18th century, the demand for food grains in Britain had increased.
- Since there was pressure from landed groups, the government also restricted the import of corn.
- The laws allowing the government to do this were commonly known as the 'Corn Laws'.
- After the Corn Laws were scrapped, food could be imported into Britain more cheaply than it could be produced within the country.
- Railways were needed to link the agricultural regions to the ports.
- New harbours had to be built and people had to settle on the lands which meant building homes and settlements.
- All these activities in turn required capital and labour. Capital flowed from financial centres such as London.
- The demand for labour in places where labour was in short supply—as in America and Australia—led to more migration.
- Nearly 50 million people emigrated from Europe to America and Australia in the 19th century in search of a better future.
- By 1890, a global agricultural economy had taken shape.
- The British Indian Government built a network of irrigation canals to transform semi-desert wastes into fertile agricultural lands that could grow wheat and cotton for export.
- The railways, steamships, the telegraph were important inventions without which we cannot imagine the transformed nineteenth-century world.
- Colonisation stimulated new investments and improvements in transport.
- The trade in meat offers a good example of this connected process. Till the 1870s, animals were shipped live from America to Europe and then slaughtered when they arrived there.
- Meat was hence an expensive luxury beyond the reach of the European poor.
- Better living conditions promoted social peace within the country and support for imperialism abroad.
- Trade flourished and markets expanded in the late nineteenth century.
- Britain and France made vast additions to their overseas territories in the late nineteenth century. Belgium and Germany became new colonial powers.
- In the 1880s, a fast-spreading disease of cattle plague or rinderpest had a terrifying impact on the African local economy. It was carried by infected cattle imported from British Asia to feed the Italian soldiers invading Eritrea in East Africa. Entering Africa in the east,

rinderpest moved west 'like forest fire'. The loss of cattle destroyed African livelihoods.

- In the late 19<sup>th</sup> century, Europeans were attracted to Africa due to its vast resources of land and minerals. But there was a shortage of labour willing to work for wages. Employers used many methods to recruit and retain labour.

- Heavy taxes were imposed which could be paid only by working for wages on plantations and mines.

- In the 19<sup>th</sup> century, hundreds of thousands of Indian and Chinese labourers went to work on plantations, in mines, and in road and railway construction projects around the world.

- In India, Indentured labourers were bonded labourers who were transferable to any countries on contract for a specific amount of wage and time. Most of the labourers were from Uttar Pradesh, Bihar, Central India and certain districts of Tamil Nadu.

- The main destinations of Indian indentured migrants were the Caribbean islands (mainly Trinidad, Guyana and Surinam), Mauritius and Fiji.

- The 19<sup>th</sup> century indenture has been described as a 'new system of slavery'.

- From the 1900s India's nationalist leaders began opposing the system of indentured labour migration as abusive and cruel. It was abolished in 1921.

- Shikaripuri Shroffs and Nattukottai Chettiars were amongst the many groups of bankers and traders who financed export agriculture in Central and Southeast Asia.

- Indian traders and moneylenders also followed European colonizers into Africa.

- With the advent of industrialisation, British cotton manufacture began to expand, and industrialists pressurised the government to restrict cotton imports and protect local industries.

- Indigo used for dyeing cloth was another important export for many decades. British manufactures flooded the Indian market.

- The value of British exports to India was much higher than the value of British imports from India. Thus, Britain had a 'trade surplus' with India.

- Britain used this surplus to balance its trade deficits with other countries – that is, with countries from which Britain was importing more than it was selling to.

**Important Terms Globalisation:** Globalisation is generally associated with economy as the free movement of capital, goods, technology, ideas and people across the globe.

Globalisation in a broader sense also includes cultural exchanges between different countries of the world. **Silk**

**Route:** The route taken by traders to carry silk cargoes from China to the West, which affected cultures of China, Central Asia and the West. **Cowrie:** A Hindi word meaning 'sea shells'. These were used in ancient world as a form of currency.

**Coolies:** Indian indentured labourers were referred to as coolies in the Caribbean islands. **Corn Laws:** British laws which imposed restrictions on the import of corn. **Dissenter:**

One who refuses to accept established beliefs and practices. **Indentured labour:** A bonded labourer under contract to work for an employer for a specific amount of time, to pay off his passage to a new country or home.

**Important Dates** **3000 BCE:** An active coastal trade linked the Indus Valley Civilization with present day West Asia. **BCE - 15th Century:** Existence of silk routes. **Mid Sixteenth Century:** Portuguese and Spanish conquest and colonisation of America. **1845 - 1849:** Potato Famine in Ireland. During this famine around 1,000,000 people died of starvation in Ireland. **1885:** The big European powers met in Berlin to complete the division of Africa between themselves. **1890:** Global agricultural economy took shape. **1890s:**

Rinderpest (cattle plague) had a terrifying impact on livelihoods of the African people and the local economy. **1892:** Rinderpest reached Africa's Atlantic coast. **1900s:** Indian nationalist leaders began opposing the system of indentured labour migration as abusive and cruel. **1914-1918:** The First World War was fought. **1921:** Indentured labour was abolished.

## Topic-2 The Inter-war and Post War Economy

- The First World War (1914-18) was mainly fought in Europe but its impact was felt around the world due to widespread economic and political instability.

- This war was thus the first modern industrial war. It saw the use of machine guns, tanks, aircraft, chemical weapons, etc., on a massive scale.

- Most of the killed and maimed were men of working age and these deaths and injuries reduced the able-bodied workforce in Europe.

- Britain borrowed large sums of money from the US banks as well as the US public which transformed the US from being an international debtor to an international creditor.

- Britain was the world's leading economy in the pre-war period but had to face a prolonged crisis. In the meanwhile industries had developed in India and Japan.

- After the war Britain found it difficult to recapture its earlier position of dominance in the Indian market, and to compete with Japan internationally.

- The war had led to an economic boom, that is, to a large increase in demand, production and employment.

- Before the war, Eastern Europe was a major supplier of wheat in the world market but during the war its supply disrupted and wheat production in Canada, America and Australia expanded immensely.

- But after the war, production in Eastern Europe revived and created a glut in wheat output. Grain prices fell, rural incomes declined, and farmers fell deeper into debt.

- One important feature of the US economy of the 1920s was mass production. A well-known pioneer of mass production was the car manufacturer Henry Ford.

- The T-Model Ford was the world's first mass-produced car.

- Mass production lowered costs and prices of engineered goods and there was an increase in the purchase of refrigerators, washing machines, radios, gramophone players, all through a system of 'hire purchase'.

- Large investments in housing and household goods seemed to create a cycle of higher employment and incomes, rising consumption demand, more investment, and yet more employment and incomes.

- By 1929 the world plunged into a depression called - The Great Depression of 1929.

- During this period most part of the world experienced catastrophic declines in production, employment, incomes and trade.

- The depression was caused by a combination of several facts of agricultural overproduction.

- Many countries financed their investments through loans from the US. The withdrawal of the US loans affected much of the rest of the world.

- With the fall in prices and the prospect of a depression the US banks had also slashed domestic lending and called back loans.

- The Great Depression's wider effects on society, politics and international relations, and on peoples' minds, proved more enduring.



- Since colonial India had become an exporter of agricultural goods and importer of manufactures, the depression immediately affected Indian trade.
- Peasants and farmers suffered more than urban dwellers because though agricultural prices fell sharply, the colonial government refused to reduce revenue demands.
- This resulted in the increase of indebtedness of the Indian peasants who used up their savings, mortgaged lands, and sold whatever jewellery and precious metals they had to meet their expenses.
- The famous economist John Maynard Keynes thought that Indian gold exports promoted global economic recovery.
- The Second World War broke out merely after two decades of the First World War and brought enormous death and destruction.
- It was fought between the Axis powers (mainly Nazi Germany, Japan and Italy) and the Allies (Britain, France, the Soviet Union and the US).
- The war caused an immense amount of economic devastation and social disruption.
- There were two impacts that influenced post-war reconstruction- the first was the US's emergence as the dominant economic, political and military power in the Western world and the second was the dominance of the Soviet Union.
- Economists and politicians drew two key lessons from inter-war economic experiences: **(i)** An industrial society based on mass production cannot be sustained without mass consumption. **(ii)** The second lesson related to a country's economic links with the outside world.
- The main aim of the post-war international economic system was to preserve economic stability and full employment in the industrial world.
- **The Bretton Woods conference established:** **(i)** The International Monetary Fund (IMF) to deal with external surpluses and deficits of its member nations **(ii)** The International Bank for Reconstruction and Development (popularly known as the World Bank) was set up to finance postwar reconstruction.
- The post-war international economic system is also often described as the Bretton Woods system which inaugurated an era of unprecedented growth of trade and incomes for the Western industrial nations and Japan.
- When the Second World War ended, large parts of the world were still under European colonial rule but in the next two decades most colonies in Asia and Africa emerged as free, independent nations.
- The IMF and the World Bank were designed to meet the financial needs of the industrial countries.
- Most developing countries did not benefit from the fast growth the Western economies experienced in the 1950s and 1960s and thus organized themselves as a group—the Group of 77 (or G-77)—to demand a New International Economic Order (NIEO).
- By the NIEO they meant a system that would give them real control over their natural resources, more development assistance, fairer prices for raw materials, and better access for their manufactured goods in developed countries' market.
- The Industrial world was hit by unemployment that began rising from the mid-1970s and remained high until the early 1990s.
- From the late 1970s MNCs also began to shift production operations to low-wage Asian countries, China being one of them.

- China became an attractive destination for investment by foreign MNCs competing to capture world markets.
- The relocation of industry to low-wage countries stimulated world trade and capital flows.

**Important Terms** **Industrial War:** Economic activities concerned with the processing of raw materials and manufacture of goods in factories, e.g., the use of machine guns, tanks, aircraft, chemical weapons, etc. **Hire Purchase:** A system by which a buyer pays for a thing in regular installments while enjoying the use of it. **The Great Depression:** A drastic decline in the world economy resulting in mass unemployment and widespread poverty that lasted from 1929 until 1939. **Bank Loan:** An amount of money loaned at interest by a bank to a borrower, usually on collateral security, for a certain period of time. **Allies:** Before the First World War, Britain, France and Russia later joined by U.S.A. formed an alliance and fought together in the First World War. **Central Powers:** An alliance formed by Germany, Austria, Hungary and Ottoman Turkey, who fought together in the First World War. **Axis Powers:** Germany, Italy and Japan were known as Axis Powers during the Second World War. **El Dorado:** The fabled city of gold. **Exchange Rates:** They link national currencies for purposes of international trade. There are broadly two kinds of exchange rates namely fixed exchange rate and floating exchange rate. **Fixed Exchange Rates:** The rates which are officially fixed by the government and do not vary with change in demand and supply of foreign currency. **Flexible or Floating Exchange Rates:** These rates fluctuate depending on demand and supply of foreign currencies in foreign exchanges markets, in principle without interference by governments. **Tariff:** Tax imposed on a country's imports from the rest of the world. Tariffs are levied at the point of entry, i.e., at the border or at the airport. **Hosay:** A riotous carnival in Trinidad (for Imam Hussain) where workers of all races and religions join to celebrate. **Plantation:** Estate for cultivation of cash crops such as tea, coffee, cotton, tobacco, sugarcane etc. **MNCs:** Multinational Corporations (MNCs) are large companies that operate in several countries at the same time. **IMF:** It is also termed as International Monetary Fund, the Bretton Woods institution. It was established to deal with external surpluses and deficits of its member nations. **IBRD:** It is abbreviated as the International Bank for Reconstruction and Development (popularly known as the World Bank). It was set up to finance post-war reconstruction. **G-77:** G-77 or Group of 77 refers to the seventy-seven developing countries that did not benefit from the fast growth western economies experienced in 1950s and 1960s.

## Chapter 5 The Age Of Industrialisation

### Topic-1 Industrialization in Britain

- Proto-industrialisation was the stage when large scale industrial production took place in the absence of modern factories for international market.
- Acquisition of colonies and expansion of trade in the 16<sup>th</sup> and 17<sup>th</sup> centuries led to greater demands for goods.
- In 1900, a popular music publisher E.T. Paull produced a music book that had a picture on the cover page, which shows a goddess like figure bearing the flag of the new century, standing on a wheel with wings to symbolise time and her flight is taking her into the future. Floating about, behind her, are the signs of progress: railway, camera, machines, printing press and factory.
- The history of industrialization is a story of development, and the modern age is the time of technological developments.
- Before the factories were started in England and Europe, there was a large scale industrial production for an international market. This was not based on factories. Many historians now refer to this phase of

industrialization as proto-industrialization.

- This proto-industrial system was controlled by merchants and the goods were produced by a vast number of producers working within their family farms, not in factories.
- After the Industrial Revolution, the new machines and steam power were used in place of animal and manual power for producing the things. The revolution replaced the cottage industry by factories.
- The earliest factories in England were set up in 1730.
- Richard Arkwright created the cotton mill. The most dynamic industries in Britain were cotton and metals.
- Growing at a rapid pace, cotton was the leading sector in the first phase of industrialisation upto the 1840s.
- The industrial workers were known as factory workers.
- The worker in the mid-nineteenth century was a traditional craftsman and labourer.
- Textiles was a dynamic sector, but a large portion of the output was produced not within factories, but outside, within domestic units.
- Before the introduction of machines in industries, silk and cotton goods from India dominated the international market in textiles.
- **The process of industrialisation was rapid. It is evident due to the following reasons:**
  - Cotton was the leading sector in the first phase of industrialization.
  - Textile was a dynamic sector.
  - Ordinary and small innovations were the basis of growth in many non-mechanised sectors such as food processing, building, pottery, glass work, tanning, furniture making, and production of implements.
  - Technological changes occurred slowly. They did not spread dramatically across the industrial landscape.
  - In Victorian Britain there was no shortage of human labour. So industrialists had no problem of labour shortage or high wage costs.
  - During this period, the upper classes—the aristocrats and the bourgeoisie – preferred things produced by hand.
  - In countries with labour shortage, industrialists were keen on using mechanical power so that the need for human labour can be minimised.
  - The abundance of labour in the market affected the lives of workers.
  - Seasonality of work in many industries meant prolonged periods without work.
  - The fear of unemployment made workers hostile to the introduction of new technology.
  - When the Spinning Jenny was introduced to the woollen industry, women who survived on hand spinning began attacking the new machines.
  - Silk and cotton goods from India dominated the international market in textiles much before the advent of machine industries.
  - A variety of Indian merchants and bankers were involved in the network of export trade – financing production, carrying goods and supplying exporters.
  - By the 1750s, the Indian merchants lost their control on exports and the European companies gradually gained power by two ways:
    - By securing a variety of concessions from local courts.
    - Through the monopoly rights to trade.
  - The trading ports of Surat and Hoogly declined and Bombay and Calcutta emerged as new ports which indicated the growth of colonial power.
  - In order to have regular supplies of goods for export, the East India Company first established political power so that it could assert a monopoly right to trade.

- In order to eliminate the existing traders and brokers connected with the cloth trade, to develop a system of management and control that would eliminate competition, control costs, and ensure regular supplies of cotton and silk goods, the East India Company took two steps–
  - They appointed a paid servant called the Gomastha to supervise weavers, collect supplies, and examine the quality of cloth.
  - It prevented Company weavers from dealing with other buyers by making it compulsory for those who took loans that they had to handover the cloth they produced to the Gomastha.
- Due to the development of cotton industries in England, the industrial groups worried about the imports from the other countries and thus pressurised the government to impose import duties on cotton textiles.
- The industrialists also persuaded the East India Company to sell British manufactures in Indian markets as well.
- **Cotton weavers in India faced two problems at the same time:**
  - Their export market collapsed, and
  - The local market shrank due to Manchester imports.
- When Civil War broke out, cotton supplies were cut off from US and thus Britain turned towards India.
- The raw cotton exports from India increased which led to the inflation of prices which affected the weavers who were starved of supplies and were forced to buy raw cotton at exorbitant prices.

**Important Terms Industrialization:** Industrialization is the process by which an economy is transformed from primarily agricultural to one based on the manufacturing of goods.

**Proto-industrialization:** Period before or beginning of industrialization. **Industrial Revolution:** The revolution that replaced the cottage industry by the factories. **Spinning Jenny:** This machine was invented by James Hargreaves in 1764. It sped up the spinning process and reduced labour demand. **Gomasthas:** They were the paid servants who were appointed by the East India Company to supervise weavers, collect supplies and examine the quality of cloth.

**Important Dates 1600:** Establishment of the East India Company. **1730:** The earliest factories in England came up. **1764:** James Hargreaves invented the Spinning Jenny. **1771:** Richard Arkwright created the first cotton mill. **1776:** A.D. Crompton invented 'Mule'. It was a combination of Spinning Jenny and cotton mill. **1781:** James Watt patented the Steam Engine. **1781:** Mathew Boulton manufactured the new model of the steam engine. **1830-1840s:** Dwarkanath Tagore set up six joint stock companies in Bengal.

## Topic-2 Industrialization in India

- The first cotton mill in Bombay came up in 1854 and it went into production two years later.
- Around the same time jute mills came up in Bengal, the first being set up in 1855.
- In north India, the Elgin Mill was started in Kanpur in the 1860s, and a year later the first cotton mill of Ahmedabad was set up.
- From the late eighteenth century, as you have read in your book last year, the British in India began exporting opium to China and took tea from China to England.
- In Bengal, Dwarkanath Tagore made his fortune in the China trade before he turned to industrial investment, setting up six joint-stock companies in the 1830s and 1840s.
- In Bombay, Parsis like Dinshaw Petit and Jamsetjee Nusserwanjee Tata built huge industrial empires in India by accumulating their wealth from exports to China and from raw cotton shipments to England.
- The European merchant-industrialists had their own

chambers of commerce which Indian businessmen were not allowed to join.

- With the expansion of factories, the demand of workers increased. Peasants and artisans who found no work in the village went to the industrial centres in search of work.
- Getting jobs was always difficult so the industrialists usually employed a jobber to get new recruits.
- A jobber was an old and trusted worker. He got people from his village, ensured them jobs, helped them settle in the city and provided them money in times of crisis.
- The jobber therefore became a person with some authority and power.
- European Managing Agencies established tea and coffee plantations, acquiring land at cheap rates from the colonial government; and they invested in mining, indigo and jute.
- As the Swadeshi Movement gathered momentum, nationalists' mobilised people to boycott foreign cloth.
- Industrial groups organised themselves to protect their collective interests, pressurizing the government to increase tariff protection and grant other concessions.
- During the First World War, British mills became busy in the production of uniform for the army and thus, suddenly India had a big home market to supply.
- Due to prolonged war, Indian factories were called upon to supply war needs: jute bags, cloth for army uniforms, tents and leather boots, horse and mule saddles and a host of other items.
- Unable to modernise and compete with the US, Germany and Japan, the economy of Britain crumbled after the war.
- Where the large industries were dominant in Bombay and Bengal, small scale industries were also growing up over the rest of the country.
- Due to technological changes the weavers started using looms with a fly shuttle which increased productivity per worker, speeded up production and reduced labour demand.
- In order to market the cloth manufactured by the British in the Indian market, the Manchester industrialists used labels like 'Made in Manchester'.

**Important Terms Fuller:** A person who 'fulls' i.e., gathers cloth by pleating. **S tapler:** A person who 'staples' or sorts wool according to its fibre. **Sepoy:** An Indian soldier in the service of the British. **Dyer:** A person who dyes fabrics.

**Jobber:** A person employed by the industrialists to get new recruits for the mills. **Carding:** The process in which fibres, such as cotton or wool are prepared prior to spinning.

**Entrepreneurs:** A person, who makes money by starting or running businesses, especially when this involves taking financial risks. **Guild:** An association of craftsmen or merchants following the same craft. These guilds protected the interests of the members and supervised the quality of the product and work. **Metropolis:** A large, densely populated city of a country or a state, often the capital of the region.

**Vagrant:** A person who has no home or jobs, especially one who begs. **Fly Shuttle:** It is a mechanical device used for weaving, moved by means of ropes and pulleys. It places the horizontal threads (called the weft) into the vertical threads (called the warp).

developed when they could support a wide range of the non-food producers.

- Cities with dense population called metropolises, vary greatly in size and complexity, which combine political and economic functions for an entire region and support very large populations.
- With the advent of industries, Industrialisation changed the form of urbanisation in the modern period by attracting large number of rural populations in the cities to work in the textile factories.
- In Britain, Leeds and Manchester were the first modern cities since it attracted large numbers of migrants to the textile mills set up in the late 18th Century.
- By 1750, one out of every nine people of England and Wales lived in London. It was a colossal city with a population of about 675,000 and continued to expand.
- According to Gareth Stedman Jones, in the 19th century England, London was "A city of clerks, shopkeepers, small investors, skilled artisans and a growing number of semi-skilled workers, soldiers, beggars, servants, casual labourers."
- During the First World War (1914-18) London began manufacturing cars and electrical goods.
- As London grew, crime became a big concern. There were the cheats and tricksters, pickpockets and petty thieves crowding the streets of London.
- Initially, in the late 18th century and early 19th century, women were employed in factories but with technological developments, women lost their industrial jobs and got confined to their household chores.
- Often the parents pushed their children into low-paid work. Andrew Mearns, a clergyman who wrote— 'The Bitter Cry of Outcast in the 1880s, showed why crime was more profitable than labouring in small underpaid factories.
- After the Industrial Revolution, large number of factories was established but the factory owners did not provide any housing facility to the migrant workers and thus, they were put up in tenements.
- Gradually poverty grew in the cities due to lack of proper housing, sanitation, ventilation, overcrowded population, etc. which became a major concern for the elite groups.
- Housing was a threat to public health, fire hazards were expected and there was a fear of rebellion and revolt by the working class (Russian Revolution of 1917 that led to communism in Russia).
- To keep London clean, attempts were made to decongest localities, green the open spaces, reduce pollution
- The London underground railway partially solved the housing crisis by carrying large masses of people to and from the city.
- The very first section of the underground train in the world opened on 10 January, 1863 between Paddington and Farringdon Street in London.
- Initially people were afraid of travelling in the underground train and those who travelled shared their experience as 'near dead of asphyxiation and heat'.
- Due to this arrangement, the population in the city became more dispersed. Better-planned suburbs and a good railway network enabled large numbers to live outside central London and travel to work.
- The city encouraged a new spirit of individualism among both men and women, and a freedom from the collective values that were a feature of the smaller rural communities.
- By the twentieth century, the urban family had been

## Chapter 6

### Work, Life And Leisure Cities In The Contemporary World

#### Topic-1 London in the 19th and 20th Century

- Towns and cities that first appeared along river valleys, such as Ur, Nippur and Mohenjo-Daro, were larger in scale than other human settlements, later cities



transformed into smaller units.

- Gradually for the wealthy Britishers, there had been annual 'London Season'.
- Several cultural events, such as the opera, the theatre and classical music performances were organised.
- For the working class, large-scale entertainment came into being, they met in pubs to have a drink, exchange news and sometimes also organize for political actions. Libraries, art galleries and museums were established to provide people with a sense of history and pride in the achievements of the British.
- London Riots: 1886 winter witnessed a 10,000 strong crowd of poor people marching to London from Deptford. They demanded relief from terrible conditions of poverty; dispersed by the police.
- In 1887, the poor people of London broke into a riot, demanding relief from the terrible conditions of poverty. The police brutally suppressed the demonstration which came to be known as the Bloody Sunday of November 1887.
- In 1889, thousands of London's dockworkers went on strike and marched through the city. The 12 day strike was called to gain recognition for the dockworkers' union.
- Due to all these demands and strikes by the people, politics was given way in the city.

**Important Terms** **Urbanization:** The process of development of a city or a town. **Individualism:** A theory that promotes the welfare of a person rather than the society. **Metropolis:** It means the capital or chief city of a country or region. **Tenements:** Cheap, usually unsafe one-room accommodation for migrant workers. **Asphyxiation:** Suffocation due to lack of oxygen supply **Temperance Movement:** A social reform movement led by middle-class people. It emerged in Britain and America from the 19th century onwards.

**Important Dates** **1880:** Population of London was 4 million. **1880:** The underground train service was expanded completely. **1887:** 13th November, 1887 a riot occurred in London, which is known as the 'Bloody Sunday'. **1889:** Dockworkers strike

### **Topic-2 Bombay in the 19th and 20th Century**

- The pace of urbanisation in India was slow under colonial rule.
- In contrast to Western Europe, Indian cities did not develop in the nineteenth century.
- A large proportion of these urban dwellers were residents of the three Presidency cities.
- These were multi-functional cities: they had major ports, warehouses, homes and offices, army camps, as well as educational institutions, museums and libraries.
- Bombay was the premier city of India. It was a group of seven islands under Portuguese control.
- The East India Company shifted its base from Surat, its principal western port, to Bombay.
- Bombay became the capital of the Bombay Presidency in 1819.
- With the growth of trade in cotton and opium, large communities of traders and bankers as well as artisans and shopkeepers came to settle in Bombay.
- The first cotton textile mill in Bombay was established in 1854.
- Bombay dominated the maritime trade of India till the twentieth century and was also at the junction head of two major railways.
- Bombay was a crowded city. From its earliest days, Bombay did not grow according to any plan, and houses, especially in the Fort area, were interspersed with gardens.
- With the rapid and unplanned expansion of the city,

the crisis of housing and water supply became acute by the mid-1850s.

- In contrast to the richer Parsis, Muslims and upper class traders, more than 70 per cent of the working people lived in the thickly populated chawls of Bombay.
- Chawls were multi-storeyed structures which had been built in the 'native' parts of the town.
- Each chawl was divided into smaller one-room tenements which had no private toilets.
- High rents forced the workers to share homes and due to the close proximity of filthy gutters, privies, buffalo stables, etc., people had to keep the windows of their rooms closed even in humid weather.
- Though water was scarce, but the people kept their houses quite clean. The homes being small, streets and neighbourhoods were used for a variety of activities such as cooking, washing and sleeping.
- Caste and family groups in the mill neighbourhoods were headed by someone who was similar to a village headman.
- People who belonged to the 'depressed classes' found it even more difficult to find housing. Lower castes were kept out of many chawls.
- In 1898 The City of Bombay Improvement Trust was established. It focused on clearing poorer homes out of the city centre.
- Expansion of the city has always posed a problem in Bombay because of a scarcity of land.
- The earliest project on the expansion of the city began in 1784. The Bombay Governor William Hornby approved the building of the great sea wall which prevented the flooding of the low-lying areas of Bombay.
- In 1864, the Back Bay Reclamation Company won the right to reclaim the western foreshore from the tip of Malabar Hill to the end of Colaba.
- A successful reclamation project was undertaken by the Bombay Port Trust, which built a dry dock between 1914 and 1918 and used the excavated earth to create the 22-acre Ballard Estate. Subsequently, the famous Marine Drive of Bombay was developed.
- Despite its massive overcrowding and difficult living conditions, Bombay appears to many as a 'mayapuri' – a city of dreams.
- In 1896, India's first movie was shot by Harishchandra Sakharam Bhatwadekar in Bombay's Hanging Gardens.
- By 1925, Bombay had become India's film capital, producing films for a national audience.
- Bombay films have contributed in a big way to produce an image of the city as a blend of dream and reality, of slums and star bungalows.
- Everywhere the city development occurred at the expense of ecology and the environment.
- Large quantities of refuse and waste products polluted air and water, while excessive noise became a feature of
- Calcutta too had a long history of air pollution. Its inhabitants inhaled grey smoke, particularly in the winter.
- High levels of pollution were a consequence of the huge population that depended on dung and wood as fuel in their daily life. But the main polluters were the industries and establishments that used steam engines run on coal.
- In 1920, the rice mills of Tollygunge began to burn rice husk instead of coal. Later the inspectors of the Bengal Smoke Nuisance Commission finally managed to control industrial smoke.

**Important Terms** **Chawls:** These are multi-storeyed structures which had been built in the 'native' parts of the

**Bombay. Mayapuri:** A city of dreams. **Depressed classes:** Term used for 'lower castes' and 'untouchables' (Dalits). **Presidency cities:** The capitals of the Bombay, Bengal and Madras Presidencies in British India. **Green Belt:** An area of open land with plants and trees for maintaining natural habitation and environment in and around the city. **Reclamation:** Reclaiming of marshy or submerged areas for settlements..

## Chapter 7 Print Culture And The Modern World

### Topic-1 Print Culture and the Modern World

- The earliest kind of print technology was developed in China, Japan and Korea. This was a system of hand printing.
- Books in China were printed by rubbing paper against the inked surface of wooden blocks.
- China was the major producer of printed materials.
- The skilled craftsmen could duplicate, with remarkable accuracy, the different style of writing called calligraphy.
- Shanghai was the hub of the new print culture.
- The oldest printed book known is a Japanese Buddhist book, the Diamond Sutra printed in AD 868.
- In medieval Japan, poets and prose writers were regularly published and books were cheap and abundant.
- In the late 18th century, at Edo, illustrated collections of paintings depicted an elite urban culture.
- For centuries, silk and spices from China flowed into Europe through the silk route.
- In the 11th century, Chinese paper reached Europe through the silk route.
- Gutenberg, son of a merchant, mastered printing technique by 1448. First book he printed was the Bible. It took him 3 years to print 180 copies.
- One hundred eighty copies of this book were printed in three years.
- Printed books at first closely resembled the written manuscripts in appearance and layout.
- Luxury editions were still written by hand on very expensive 'Vellum' meant for aristocratic circles.
- The print revolution transformed the lives of people.
- In 1517, the religious reformer Martin Luther wrote 'Ninety Five Theses' criticising the Catholic Church.
- Printing helped to spread the new ideas of Reformation.
- The Roman Church imposed severe controls over publishers and booksellers.
- In England, penny chapbooks were carried, by petty peddlers known as chapmen sold for a penny.
- In France, small chapbooks called the 'Biliotheque Bleue' were sold at low-price.
- The periodical press, newspapers and journals carried information about wars and trade, as well as news of development in other places.
- The ideas and writings of the scientists like Isaac Newton, Thomas Paine, Voltaire and Jean Jacques Rousseau
- The French Revolution occurred as printing helped the spread of ideas.
- Primary education became compulsory from the late 19th century; children became an important category of readers.
- A children's press, devoted to literature for children was set up in France in 1857.
- Penny magazines were specially meant for women.
- The best known novelists were Jane Austen, the

Bronte Sisters and George Eliot.

- In the 19th century, libraries in England became instruments for educating the factory workers, artisans and lower middle-class people.
- Self-educated working class people wrote political tracts and autobiographies.
- By the late 18th century, the press came to be made out of metal.
- Richard M. Hoe of New York made the power driven cylindrical press, which was capable of printing 8,000 sheets per hour. This press was used for printing newspapers.
- In the late 19th century, the offset press was developed.
- In 1930s, publishers brought out cheap paperback editions.
- Printers and publishers continuously developed new strategies to sell their product. In the 1920s in England, popular works were sold in cheap series, called the Shilling series

**Important Terms Calligraphy:** Calligraphy is an ancient writing technique using flat edged pens to create artistic lettering using thick and thin lines depending on the direction of the stroke. **Diamond Sutra:** The oldest Japanese book printed in AD 868 containing six sheets of text and woodcut illustrations. **Compositor:** The person who composes the text for printing. **Despotism:** A system of governance in which absolute power is exercised by an individual, unregulated by legal and constitutional checks. **Almanac:** An almanac is an annual publication that includes information like weather forecasts, farmers' planting dates, tide tables, and other tabular data often arranged according to the calendar.

**Denominations:** Sub-groups within a religion. For example, a Christian can be Eastern Orthodox, Anglican, Roman Catholic, Protestant, etc. **Anthology:** A collection of literary works chosen by the compiler. It may be a collection of poems, short stories, plays, songs, or excerpts. **Galley:** Metal frame in which types are laid and the text composed. **Chapbooks:** Pocket size books that were popular in the 16th century print revolution. **Taverns:** A tavern is a place of business where people gather to drink alcoholic beverages and be served food, and in most cases, where travellers receive lodging. **Protestant Reformation:** The religious revolution that took place in the Western church in the 16th century. Its greatest leaders undoubtedly were Martin Luther and John Calvin.

**Lithography:** The process of printing from a smooth surface, viz., a metal plate that has been specially prepared so that ink only sticks to the design to be printed. **Revolution:** Cause to change fundamentally. **Ulama:** Legal scholars of Islam and the Sharia (a body of Islamic law). **Vellum:** A parchment made from the skin of animals. **New Testament:** The second part of the Bible that describes the life and the teachings of Jesus Christ. **Scribes:** Skilled hand writers of manuscripts. **Platen:** In letter press printing, platen is a board which is pressed onto the back of the paper to get the impression from the type. At one time it used to be a wooden board, later it was made of steel. **Parchment:** Skin of animals like goat or sheep, specially prepared for the purpose of writing, painting, etc.

**Important Dates 594 A.D.:** Books in China were printed by rubbing paper against the inked surface of woodblocks. **768 - 770 A.D.:** Hand printing technology was introduced in Japan. **11th Century:** Paper reached Europe from China. **1295 A.D.:** Marco Polo brought the knowledge of producing books with woodblocks to Europe from China. **1448 A.D.:** Johann Gutenberg invented the printing press. **1450-1550 A.D.:** Printing presses set up in most countries of Europe. **1517 A.D.:** Religious reformer Martin Luther printed 'Ninety Five Theses', criticizing many of the practices and rituals of the Roman Catholic Church, starting the 'Protestant Reformation'. **1558 A.D.:** The Roman Church began maintaining an index of prohibited books.

### Topic-2 The Growth of Press in 19th Century India

- India had a very rich and old tradition of hand written manuscripts in Sanskrit, Arabic and Persian as well as in various vernacular languages.
- In India, manuscripts were copied on palm leaves and on hand made paper.
- In 1710, Dutch missionaries had printed 32 Tamil texts.
- From 1780, James August Hickey began to edit the 'Bengal Gazette', a weekly magazine.
- By the close of the 18th century, printing of many newspapers and journals started.
- In the early 19th century, there were intense debates around existing religious issues.
- Some groups wanted reforms, while others were against them.
- This was a time of intense controversies between social and religious reforms.
- The reformers were focused on the Hindu orthodoxy over matters like widow immolation, monotheism, Brahmanical priesthood and idolatry.
- Many newspapers such as "Sambad Kaumudi" in 1821 (by Ram Mohan Roy) "Samachar Chandrika" (Hindu Orthodoxy), "Jam-i-Jahan Nama" and "Shamsul Akbar" from 1822 Persian newspaper) focused on this matter.
- In North India, the 'Ulama' used lithographic presses, published Persian and Urdu translation of Holy Scriptures, and printed religious newspapers and tracts to spread their religion.
- In 1867, Deoband seminary was founded which published thousands of 'Fatwas' telling the code of conduct of Muslims and explaining the meanings of doctrines.
- Print encouraged the reading of religious texts, especially in the vernacular languages.
- The first printed edition of the Ramcharitmanas came out from Calcutta in 1810.
- Naval Kishore Press at Lucknow and the Shri Venkateshwar Press in Bombay published numerous religious texts in vernaculars.

- At the end of the 19th century, a new visual culture was started.
- Painters like Raja Ravi Verma produced images for mass circulation.
- Cheap prints and calendars were easily available in the market.
- By the 1870's, caricatures and cartoons were being published in journals and newspapers.
- In 1860, few Bengali women like Kailashbhashini Debi wrote books highlighting the experiences of women.
- Hindi printing began from the 1870s.
- In Punjab, folk literature was printed from the early 20th century.
- In Bengal, the Battala was devoted to the printings of popular books; peddlers took the Battala publications to homes, enabling women to read in leisure time.
- Public libraries were set up in the early 20th century.
- Local protest movements created a lot of popular journals.
- After the revolt of 1857, the attitude to freedom of the press changed.
- In 1878, the Vernacular Press Act was passed.
- In 1907, Bal Gangadhar Tilak wrote with great sympathy about Punjab revolution in his "Kesari". This led to his imprisonment in 1908.

**Important Terms** **Manuscript:** Book or document written by hand. It can also be termed as author's original copy – handwritten or typed but not printed. **Ballad:** A historical account or folk tale in verse usually sung or recited. **Autobiography:** Story of one's own life written by the author himself or herself. **Inquisition:** A judicial procedure and later an institution that was established by the papacy and, sometimes, by secular governments to combat heresy. **Heretical:** Beliefs which do not follow the accepted teachings of the Church. **Satiety:** The state of being fulfilled much beyond the point of satisfaction. **Fatwa:** A legal pronouncement of Islamic law usually given by a mufti (legal scholar) to clarify issues on which the law is uncertain.



# NCERT Class 11

## Ancient India (Old NCERT)

### GIST OF NCERT Classwise 30 Books

#### Chapter 1

#### India- Geographical Features And Their Impact On History

##### Learning Objectives

*Students will acquire knowledge about*

1. The geographical features of India.
2. The Himalayan Mountains and their impact on Indian history.
3. The Gangetic plains and their role in Indian history.
4. The Southern Peninsula and its effects on South Indian history.
5. India's unity in diversity

It is generally said that history has two eyes - one is chronology and the other is geography. In other words time and space are significant factors in determining the historical process. In particular, a country's geography largely determines its historical events. The history of India is also influenced by its geography. Hence, the study of Indian geographical features contributes to the better understanding of its history.

The Indian subcontinent is a well-defined geographical unit. It may be divided into three major regions: the Himalayan Mountains, the Indo-Gangetic Plains and the Southern Peninsula. There are five countries in the subcontinent - India, Pakistan, Bangladesh, Nepal and Bhutan. India is the largest among them and it comprises twenty-eight states and six Union Territories. According to the 2001 Census, the population of India is over one hundred crores.

##### The Himalayan Mountains

The Himalayan Mountains are situated on the north of India. Starting from the Pamir in the extreme northwest of India, the mighty Himalayan range extends towards northeast. It has a length of nearly 2560 kilometres with an average breadth of 240 to 320 kilometres. The highest peak of the Himalayas is known as Mount Everest with its height being 8869 metres. It acts as a natural wall and protects the country against the cold arctic winds blowing from Siberia through Central Asia. This keeps the climate of northern India fairly warm throughout the year. The Himalayan region is mostly inhospitable in winter and generally covered with snow. It was considered for a long time that the Himalayas stood as a natural barrier to protect India against invasions. But, the passes in the northwest mountains such as the Khyber, Bolan, Kurram and Gomal provided easy routes between India and Central Asia. These passes are situated in the Hindukush, Sulaiman and Kirthar ranges. From prehistoric times, there was a continuous flow of traffic through these passes. Many people came to India through these passes as invaders and immigrants. The Indo-Aryans, the Indo-Greeks, Parthians, Sakas, Kushanas, Hunas and Turks entered India through these passes. The Swat valley in this region formed another important route. Alexander of

Macedon came to India through this route. Apart from invading armies, missionaries and merchants came to India using these routes. Therefore, these passes in the northwest mountains had facilitated trade as well as cultural contacts between India and the Central Asia. In the north of Kashmir is Karakoram Range. The second highest peak in the world, Mount Godwin Austen is situated here. This part of the Himalayas and its passes are high and snow-covered in the winter. The Karakoram highway via Gilgit is connected to Central Asia but there was little communication through this route.

The valley of Kashmir is surrounded by high mountains. However, it could be reached through several passes. The Kashmir valley remains unique for its tradition and culture. Nepal is also a small valley under the foot of the Himalayas and it is accessible from Gangetic plains through a number of passes.

In the east, the Himalayas extend up to Assam. The important mountains in this region are Pat Koi, Nagai and Lushai ranges. These hills are covered with thick forests due to heavy rains and mostly remain inhospitable. The mountains of northeast India is difficult to cross and many parts of this region had remained in relative isolation.

##### The Indo-Gangetic Plain

The Indo-Gangetic plain is irrigated by three important rivers, the Ganges, Indus and Brahmaputra. This vast plain is most fertile and productive because of the alluvial soil brought by the streams of the rivers and its tributaries.

The Indus river rises beyond the Himalayas and its major tributaries are the Jhelum, Chenab, Ravi, Sutlej and Beas. The Punjab plains are benefited by the Indus river system. The literal meaning of the term 'Punjab' is the land of five rivers. Sind is situated at the lower valley of the Indus. The Indus plain is known for its fertile soil. The Thar Desert and Aravalli hills are situated in between the Indus and Gangetic plains. Mount Abu is the highest point (5650 ft.) in the Aravalli hills. The Ganges river rises in the Himalayas, flows south and then towards the east. The river Yamuna flows almost parallel to the Ganges and then joins it. The area between these two rivers is called *doab* - meaning the land between two rivers. The important tributaries of the Ganges are the Gomati, Sarayu, Ghagra and Gandak. In the east of India, the Ganges plain merges into the plains of Brahmaputra. The river Brahmaputra rises beyond the Himalayas, flows across Tibet and then continues through the plains of northeast India. In the plains, it is a vast but a slow-moving river forming several islands.

The Indo-Gangetic plain has contributed to the rise of urban centres, particularly on the river banks or at the confluence of rivers. The Harappan culture flourished in the Indus valley. The Vedic culture prospered in the western Gangetic plain. Banares, Allahabad, Agra, Delhi

and Pataliputra are some of the important cities of the Gangetic plain. The city of Pataliputra was situated at the confluence of Son river with the Ganges. In the ancient period Pataliputra had remained the capital for the Mauryas, Sungas, Guptas and other kingdoms. The most important city on the western side of the Gangetic plain is Delhi. Most of the decisive battles of Indian history such as the Kurukshetra, Tarain and Panipat were fought near Delhi. Also, this plain had always been a source of temptation and attraction for the foreign invaders due to its fertility and productive wealth. Important powers fought for the possession of these plains and valleys. Especially the Ganga-Yamuna *doab* proved to be the most coveted and contested area. The rivers in this region served as arteries of commerce and communication. In ancient times it was difficult to make roads, and so men and material were moved by boat. The importance of rivers for communication continued till the days of the East India Company.

### The Southern Peninsula

The Vindhya and Satpura mountains along with Narmada and the Tapti rivers form the great dividing line between northern and southern India. The plateau to the south of the Vindhya Mountains is known as the Deccan plateau. It consists of volcanic rock, which is different from the northern mountains. As these rocks are easier to cut into, we find a number of rock-cut monasteries and temples in the Deccan.

The Deccan plateau is flanked by the Eastern Ghats and Western Ghats. The Coramandal Coast stands between the Eastern Ghats and the Bay of Bengal. The Western Ghats runs along the Arabian sea and the lands between these are known as Konkan up to Goa and beyond that as Kanara. The southernmost part is known as Malabar Coast. The passes in the Western Ghats like Junnar, Kanheri and Karle linked the trade routes to the western ports. The Deccan plateau acted as a bridge between the north and south India. However, the dense forests in the Vindhya Mountains makes this region isolated from the north. The language and culture in the southern peninsula are preserved in tact for a long time due to this geographical isolation.

In the southern end remains the famous Palghat Pass. It is the passage across the Ghats from the Kaveri valley to the Malabar Coast. The Palghat Pass was an important trade route for the Indo- Roman trade in the ancient times. The Anaimudi is the highest peak in the southern peninsula. Doddapetta is another highest peak in the Western Ghats. The Eastern Ghats are not very high and have several openings caused by the eastward flow of the rivers into the Bay of Bengal. The port cities of Arikamedu, Mamallapuram and Kaveripattanam were situated on the Coramandal coast.

The major rivers of the southern peninsula are almost running parallel. Mahanadhi is at the eastern end of the peninsula. Narmadha and Tapti run from east to west. Other rivers like the Godavari, Krishna, Tungabhadra and Kaveri flow from west to east. These rivers make the plateau into a fertile rice producing soil. Throughout history, the region between Krishna and Tungabhadra (Raichur *Doab*) remained a bone of contention between the major kingdoms of the south. The deltaic plains formed by these two rivers at their mouths became famous under the Satavahanas. A number of towns and ports flourished in these plains in the beginning of the Christian era.

The Kaveri delta constitutes a distinct geographical zone in the far south. It became the seat of the Chola

power. The Kaveri basin with its rich tradition, language and culture has flourished from the ancient times.

As the southern peninsula is gifted with a long coastline, the people of this region took keen interest in the maritime activities. A great deal of trade and commerce went on through the seaways from the earliest times. In the east, mariners reached countries like Jawa, Sumatra, Burma and Cambodia. Apart from trade, they spread Indian art, religion and culture in these parts of the world. The commercial contacts between south India and the Greco-Roman countries flourished along with cultural relations.

### India - A Land of Unity in Diversity

The history of ancient India is interesting because India proved to be a melting pot of numerous races. The pre-Aryans, the Indo- Aryans, the Greeks, the Scythians, the Hunas, the Turks, etc., made India their home. Each ethnic group contributed its might to the making of Indian culture. All these peoples mixed up so inextricably with one another that at present none of them can be identified in their original form. Different cultures mingled with one another through the ages. Many pre-Aryan or Dravidian terms occur in the Vedic texts. Similarly, many Pali and Sanskritic terms appear in the Sangam literature.

Since ancient times, India has been the land of several religions. Ancient India witnessed the birth of Hinduism, Jainism and Buddhism. But all these cultures and religions intermingled with one another. Although Indians people speak different languages, practice different religions, and observe different social customs, they follow certain common styles of life throughout the country. Therefore, our country shows a deep underlying unity in spite of great diversity.

In fact, the ancients strove for unity. They looked upon this vast subcontinent as one land. The name *Bharatavarsha* or the land of Bharata was given to the whole country, after the name of an ancient tribe called the Bharatas. Our ancient poets, philosophers and writers viewed the country as an integral unit. This kind of political unity was attained at least twice during the Mauryan and Gupta Empires.

The unity of India was also recognized by foreigners. They first came into contact with the people living on the Sindhu or the Indus, and so they named the whole country after this river. The word *Hind* is derived from the Sanskrit term *Sindhu*, and in course of time the country came to be known as 'India' in Greek, and 'Hind' in Persian and Arabic languages.

Efforts for the linguistic and cultural unity of the country were made through the ages. In the third century B.C., Prakrit language served as the *lingua franca* of the country. Throughout the major portion of India, Asoka's inscriptions were written in the Prakrit language. Also, the ancient epics, the *Ramayana* and the *Mahabharata*, were studied with the same zeal and devotion throughout the country. Originally composed in Sanskrit, these epics came to be presented in different local languages. Although the Indian cultural values and ideas were expressed in different forms, the substance remained the same throughout the country.

Hence, India has emerged a multi-religious and multi-cultural society. However, the underlying unity and integrity and the plural character of Indian society remain the real strength for the development of the country.

## Pre-Historic India And The Harappan Culture

### Learning Objectives

Students will acquire knowledge about

1. The Pre-historic period.
2. Origin and evolution of the Harappan Civilization.
3. Socio-economic condition of the Harappan people.
4. Cultural life of the Harappans.
5. The Decline of the Harappan Civilization.

The history of human settlements in India goes back to prehistoric times. No written records are available for the prehistoric period. However, plenty of archaeological remains are found in different parts of India to reconstruct the history of this period. They include the stone tools, pottery, artifacts and metal implements used by pre-historic people. The development of archaeology helps much to understand the life and culture of the people who lived in this period.

In India, the prehistoric period is divided into the Paleolithic (Old Stone Age), Mesolithic (Middle Stone Age), Neolithic (New Stone Age) and the Metal Age. However, these periods were not uniform throughout the Indian subcontinent. The dating of the prehistoric period is done scientifically. The technique of radio-carbon dating is commonly used for this purpose. It is based on measuring the loss of carbon in organic materials over a period of time. Another dating method is known as dendro-chronology. It refers to the number of tree rings in wood. By counting the number of tree rings in the wood, the date of the wood is arrived at.

### Paleolithic or Old Stone Age

The Old Stone Age sites are widely found in various parts of the Indian subcontinent. These sites are generally located near water sources. Several rock shelters and caves used by the Paleolithic people are scattered across the subcontinent. They also lived rarely in huts made of leaves. Some of the famous sites of Old Stone Age in India are:

- a. The Soan valley and Potwar Plateau on the northwest India.
- b. The Siwalik Hills on the north India.
- c. Bhimpetka in Madhya Pradesh.
- d. Adamgarh hill in Narmada valley.
- e. Kurnool in Andhra Pradesh and Attirampakkam near Chennai.

In the Old Stone Age, food was obtained by hunting animals and gathering edible plants and tubers. Therefore, these people are called as hunter-gatherers. They used stone tools, hand-sized and flaked-off large pebbles for hunting animals. Stone implements are made of a hard rock known as quartzite. Large pebbles are often found in river terraces.

The hunting of large animals would have required the combined effort of a group of people with large stone axes. We have little knowledge about their language and communication. Their way of life became modified with the passage of time since they made attempts to domesticate animals, make crude pots and grow some plants. A few Old Stone Age paintings have also been found on rocks at Bhimbetka and other places. The period before 10000 B.C. is assigned to the Old Stone Age.

### Mesolithic or Middle Stone Age

The next stage of human life is called Mesolithic or Middle Stone Age which falls roughly from 10000 B.C. to 6000 B.C. It was the transitional phase between the

Paleolithic Age and Neolithic Age. Mesolithic remains are found in Langhanj in Gujarat, Adamgarh in Madhya Pradesh and also in some places of Rajasthan, Uttar Pradesh and Bihar. The paintings and engravings found at the rock shelters give an idea about the social life and economic activities of Mesolithic people. In the sites of Mesolithic Age, a different type of stone tools is found. These are tiny stone artifacts, often not more than five centimeters in size, and therefore called microliths. The hunting-gathering pattern of life continued during this period. However, there seems to have been a shift from big animal hunting to small animal hunting and fishing. The use of bow and arrow also began during this period. Also, there began a tendency to settle for longer periods in an area. Therefore, domestication of animals, horticulture and primitive cultivation started. Animal bones are found in these sites and these include dog, deer, boar and ostrich. Occasionally, burials of the dead along with some microliths and shells seem to have been practiced.

### Neolithic Age

A remarkable progress is noticed in human civilization in the Neolithic Age. It is approximately dated from 6000 B.C to 4000 B.C. Neolithic remains are found in various parts of India. These New stone Age Tools include the Kashmir valley, Chirand in Bihar, Belan valley in Uttar Pradesh and in several places of the Deccan. The important Neolithic sites excavated in south India are Maski, Brahmagiri, Hallur and Kodekal in Karnataka, Paiyampalli in Tamil Nadu and Utnur in Andhra Pradesh.

The chief characteristic features of the Neolithic culture are the practice of agriculture, domestication of animals, polishing of stone tools and the manufacture of pottery. In fact, the cultivation of plants and domestication of animals led to the emergence of village communities based on sedentary life.

There was a great improvement in technology of making tools and other equipments used by man. Stone tools were now polished. The polished axes were found to be more effective tools for hunting and cutting trees. Mud brick houses were built instead of grass huts. Wheels were used to make pottery. Pottery was used for cooking as well as storage of food grains. Large urns were used as coffins for the burial of the dead. There was also improvement in agriculture. Wheat, barely, rice, millet were cultivated in different areas at different points of time. Rice cultivation was extensive in eastern India. Domestication of sheep, goats and cattle was widely prevalent. Cattle were used for cultivation and for transport. The people of Neolithic Age used clothes made of cotton and wool.

### Metal Age

The Neolithic period is followed by Chalcolithic (copper-stone) period when copper and bronze came to be used. The new technology of smelting metal ore and crafting metal artifacts is an important development in human civilization. But the use of stone tools was not given up. Some of the micro-lithic tools continued to be essential items. People began to travel for a long distance to obtain metal ores. This led to a network of Chalcolithic cultures and the Chalcolithic cultures were found in many parts of India.

Generally, Chalcolithic cultures had grown in river valleys. Most importantly, the Harappan culture is considered as a part of Chalcolithic culture. In South India the river valleys of the Godavari, Krishna, Tungabhadra, Pennar and Kaveri were settled by



farming communities during this period. Although they were not using metals in the beginning of the Metal Age, there is evidence of copper and bronze artifacts by the end of second millennium B.C. Several bronze and copper objects, beads, terracotta figurines and pottery were found at Paiyampalli in Tamil Nadu.

The Chalcolithic age is followed by Iron Age. Iron is frequently referred to in the Vedas. The Iron Age of the southern peninsula is often related to Megalithic Burials. Megalith means Large Stone. The burial pits were covered with these stones. Such graves are extensively found in South India. Some of the important megalithic sites are Hallur and Maski in Karnataka, Nagarjunakonda in Andhra Pradesh and Adichchanallur in Tamil Nadu. Black and red pottery, iron artifacts such as hoes and sickles and small weapons were found in the burial pits.

## **The Harappan Civilization**

The earliest excavations in the Indus valley were done at Harappa in the West Punjab and Mohenjodaro in Sind. Both places are now in Pakistan. The findings in these two cities brought to light a civilization. It was first called the 'The Indus Valley Civilization'. But this civilization was later named as the 'Indus Civilization' due to the discovery of more and more sites far away from the Indus valley. Also, it has come to be called the 'Harappan Civilization' after the name of its first discovered site.

## **Important Sites**

Among the many other sites excavated, the most important are Kot Diji in Sind, Kalibangan in Rajasthan, Rupar in the Punjab, Banawali in Haryana, Lothal, Surkotada and Dholavira, all the three in Gujarat. The larger cities are approximately a hundred hectares in size. Mohenjodara is the largest of all the Indus cities and it is estimated to have spread over an area of 200 hectares.

## **Origin and Evolution**

The archaeological findings excavated for the last eight decades reveal the gradual development of the Harappan culture. There are four important stages or phases of evolution and they are named as pre-Harappan, early-Harappan, mature-Harappan and late Harappan.

The pre-Harappan stage is located in eastern Baluchistan. The excavations at Mehrgarh 150 miles to the northwest of Mohenjodaro reveal the existence of pre-Harappan culture. In this stage, the nomadic people began to lead a settled agricultural life.

In the early-Harappan stage, the people lived in large villages in the plains. There was a gradual growth of towns in the Indus valley. Also, the transition from rural to urban life took place during this period. The sites of Amri and Kot Diji remain the evidence for early-Harappan stage. In the mature-Harappan stage, great cities emerged. The excavations at Kalibangan with its elaborate town planning and urban features prove this phase of evolution.

In the late-Harappan stage, the decline of the Indus culture started. The excavations at Lothal reveal this stage of evolution. Lothal with its port was founded much later. It was surrounded by a massive brick wall as flood protection. Lothal remained an emporium of trade between the Harappan civilization and the remaining part of India as well as Mesopotamia.

In 1931, Sir John Marshall estimated the duration of the occupation of Mohenjodaro between 3250 and 2750 B.C. Subsequently, as and when new sites were

discovered, the dating of the Harappan culture is modified. The advent of the radiocarbon method paves way for fixing almost accurate dates. By 1956, Fairervis brought down the dating of the Harappan culture to between 2000 and 1500 B.C. on the basis of radiocarbon dates of his findings. In 1964, D.P. Agarwal came to the conclusion that the total span of this culture should be between 2300 and 1750 B.C. Yet, there is further scope of modification of these dates.

## **Salient Features of the Harappan Culture**

### **Town Planning**

The Harappan culture was distinguished by its system of town planning on the lines of the grid system - that is streets and lanes cutting across one another almost at right angles thus dividing the city into several rectangular blocks. Harappa, Mohenjodaro and Kalibangan each had its own citadel built on a high podium of mud brick. Below the citadel in each city lay a lower town containing brick houses, which were inhabited by the common people.

### **Great Bath at Mohenjodaro**

The large-scale use of burnt bricks in almost all kinds of constructions and the absence of stone buildings are the important characteristics of the Harappan culture. Another remarkable feature was the underground drainage system connecting all houses to the street drains which were covered by stone slabs or bricks. The most important public place of Mohenjodaro is the Great Bath measuring 39 feet length, 23 feet breadth and 8 feet depth. Flights of steps at either end lead to the surface. There are side rooms for changing clothes. The floor of the Bath was made of burnt bricks. Water was drawn from a large well in an adjacent room, and an outlet from one corner of the Bath led to a drain. It must have served as a ritual bathing site. The largest building in Mohenjodaro is a granary measuring 150 feet length and 50 feet breadth. But in the citadel of Harappa we find as many as six granaries.

## **Economic life**

There was a great progress in all spheres of economic activity such as agriculture, industry and crafts and trade. Wheat and barley were the main crops grown besides sesame, mustard and cotton. Surplus grain is stored in granaries. Animals like sheep, goats and buffalo were domesticated. The use of horse is not yet firmly established. A number of other animals were hunted for food including deer.

Specialized groups of artisans include goldsmiths, brick makers, stone cutters, weavers, boat-builders and terracotta manufacturers. Bronze and copper vessels are the outstanding examples of the Harappan metal craft. Gold and silver ornaments are found in many places. Pottery remains plain and in some places red and black painted pottery is found. Beads were manufactured from a wide variety of semi-precious stones. Internal trade was extensive with other parts of India. Foreign trade was mainly conducted with Mesopotamia, Afghanistan and

Iran. Gold, copper, tin and several semi-precious stones were imported. Main exports were several agricultural products such as wheat, barley, peas, oil seeds and a variety of finished products including cotton goods, pottery, beads, terracotta figures and ivory products. There is much evidence to prove the trade links between the Indus and Sumerian people. Many seals of Indus valley have been found in Mesopotamia. Trade was of the barter type. The seals and the terracotta models of the Indus valley reveal the use of bullock carts

and oxen for land transport and boats and ships for river and sea transport.

### Social Life

Much evidence is available to understand the social life of the Harappans. The dress of both men and women consisted of two pieces of cloth, one upper garment and the other lower garment. Beads were worn by men and women. Jewellery such as bangles, bracelets, fillets, girdles, anklets, ear-rings and finger-rings were worn by women. These ornaments were made of gold, silver, copper, bronze and semi precious **ORNAMENTS USED BY THE** stones. The use of cosmetics was common. Various household articles made of pottery, stone, shells, ivory and metal have been found at Mohenjodaro. Spindles, needles, combs, fishhooks, knives are made of copper. Children's toys include little clay carts. Marbles, balls and dice were used for games. Fishing was a regular occupation while hunting and bull fighting were other pastimes. There were numerous specimens of weapons of war such as axes, spearheads, daggers, bows, arrows made of copper and bronze.

### Arts

The Harappan sculpture revealed a high degree of workmanship. Figures of men and women, animals and birds made of terracotta and the carvings on the seals show the degree of proficiency attained by the sculptor. The figure of a dancing girl from Mohenjodaro made of bronze is remarkable for its workmanship. Its right hand rests on the hip, while the left arm, covered with bangles, hangs loosely in a relaxed posture. Two stone statues from Harappa, one representing the back view of a man and the other of a dancer are also specimens of their sculpture, **TERRACOTTA** The pottery from Harappa is another specimen of **FIGURINE** the fine arts of the Indus people. The pots and jars were painted with various designs and colours. Painted pottery is of better quality. The pictorial motifs consisted of geometrical patterns like horizontal lines, circles, leaves, plants and trees. On some pottery pieces we find figures of fish or peacock.

### Script

The Harappan script has still to be fully deciphered. The number of signs is between 400 and 600 of which 40 or 60 are basic and the rest are their variants. The script was mostly written from right to left. In a few long seals the boustrophedon method - writing in the reverse direction in alternative lines - was adopted. Parpola and his Scandinavian colleagues came to the conclusion that the **HARAPPAN SCRIPT** language of the Harappans was Dravidian. A group of Soviet scholars accepts this view. Other scholars provide different view connecting the Harappan script with that of Brahmi. The mystery of the Harappan script still exists and there is no doubt that the decipherment of Harappan script will throw much light on this culture.

### Religion

From the seals, terracotta figurines and copper tablets we get an idea on the religious life of the Harappans. The chief male deity was Pasupati, (proto-Siva) represented in seals as sitting in a yogic posture with three faces and two horns. He is surrounded by four animals (elephant, tiger, rhino, and buffalo each facing a different direction). Two deer appear on his feet. The chief female deity was the Mother Goddess represented in terracotta figurines. In latter times, Linga worship was prevalent. Trees and animals were also worshipped by the Harappans. They believed in ghosts and evil forces and used amulets as protection against them.

### Burial Methods

The cemeteries discovered around the cities like Mohenjodaro, Harappa, Kalibangan, Lothal and Rupar throw light on the burial practices of the Harappans. Complete burial and post-cremation burial were popular at Mohenjodaro. At Lothal the burial pit was lined with burnt bricks indicating the use of coffins. Wooden coffins were also found at Harappa. The practice of pot burials is found at Lothal sometimes with pairs of skeletons. However, there is no clear evidence for the practice of Sati.

### Decline of the Harappan Culture

There is no unanimous view pertaining to the cause for the decline of the Harappan culture. Various theories have been postulated. Natural calamities like recurring floods, drying up of rivers, decreasing fertility of the soil due to excessive exploitation and occasional earthquakes might have caused the decline of the Harappan cities. According to some scholars the final blow was delivered by the invasion of Aryans. The destruction of forts is mentioned in the Rig Veda. Also, the discovery of human skeletons huddled together at Mohenjodaro indicates that the city was invaded by foreigners. The Aryans had superior weapons as well as swift horses which might have enabled them to become masters of this region.

## Chapter 3 The Vedic Culture

### Learning Objectives

*Students will acquire knowledge about*

1. The original home of the Aryans.
2. The Vedic Literature and their importance.
3. The Rig Vedic Age and its culture.
4. The Later Vedic Age and its culture.

The cities of the Harappan Culture had declined by 1500 B.C. Consequently, their economic and administrative system had slowly declined. Around this period, the speakers of Indo-Aryan language, Sanskrit, entered the north-west India from the Indo-Iranian region. Initially they would have come in small numbers through the passes in the northwestern mountains. Their initial settlements were in the valleys of the north-west and the plains of the Punjab. Later, they moved into Indo-Gangetic plains. As they were mainly a cattle-keeping people, they were mainly in search of pastures. By 6<sup>th</sup> century B.C., they occupied the whole of North India, which was referred to as Aryavarta. This period between 1500 B.C and 600 B.C may be divided into the Early Vedic Period or Rig Vedic Period (1500 B.C -1000 B.C) and the Later Vedic Period (1000B.C - 600 B.C).

### Original Home of the Aryans

The original home of the Aryans is a debatable question and there are several views. Different scholars have identified different regions as the original home of the Aryans. They include the Arctic region, Germany, Central Asia and southern Russia. Bala Gangadhar Tilak argues that the Aryans came from the Arctic region on astronomical calculations. However, the theory of southern Russia appears to be more probable and widely accepted by historians. From there, the Aryans moved to different parts of Asia and Europe. They entered India in about 1500 B.C. and came to be known as Indo-Aryans. They spoke the Indo-Aryan language, Sanskrit.

## Vedic Literature

The word 'Veda' is derived from the root 'vid', which means to know. In other words, the term 'Veda' signifies 'superior knowledge'. The Vedic literature consists of the four Vedas - Rig, Yajur, Sama and Atharva. The Rig Veda is the earliest of the four Vedas and it consists of 1028 hymns. The hymns were sung in praise of various gods. The Yajur Veda consists of various details of rules to be observed at the time of sacrifice. The Sama Veda is set to tune for the purpose of chanting during sacrifice. It is called the book of chants and the origins of Indian music are traced in it. The Atharva Veda contains details of rituals.

Besides the Vedas, there are other sacred works like the Brahmanas, the Upanishads, the Aranyakas and the epics Ramayana and Mahabharata. The Brahmanas are the treatises relating to prayer and sacrificial ceremony. The Upanishads are philosophical texts dealing with topic like the soul, the absolute, the origin of the world and the mysteries of nature. The Aranyakas are called forest books and they deal with mysticism, rites, rituals and sacrifices. The author of Ramayana was Valmiki and that of Mahabharata was Vedavyas.

## Rig Vedic Age or Early Vedic Period (1500 - 1000 B.C.)

During the Rig Vedic period, the Aryans were mostly confined to the Indus region. The Rig Veda refers to Saptasindhu or the land of seven rivers. This includes the five rivers of Punjab, namely Jhelum, Chenab, Ravi, Beas and Sutlej along with the Indus and Saraswathi. The political, social and cultural life of the Rig Vedic people can be traced from the hymns of the Rig Veda.

## Political Organization

The basic unit of political organization was *kula* or family. Several families joined together on the basis of their kinship to form a village or grama. The leader of grama was known as gramani. A group of villages constituted a larger unit called *visu*. It was headed by vishayapati. The highest political unit was called jana or tribe. There were several tribal kingdoms during the Rig Vedic period such as Bharatas, Matsyas, Yadus and Purus. The head of the kingdom was called as *rajan* or king. The Rig Vedic polity was normally monarchical and the succession was hereditary. The king was assisted by *purohita* or priest and *senani* or commander of the army in his administration. There were two popular bodies called the *Sabha* and *Samiti*. The former seems to have been a council of elders and the latter, a general assembly of the entire people.

## Social Life

The Rig Vedic society was patriarchal. The basic unit of society was family or *graham*. The head of the family was known as *grahapathi*. Monogamy was generally practiced while polygamy was prevalent among the royal and noble families. The wife took care of the household and participated in all the major ceremonies. Women were given equal opportunities as men for their spiritual and intellectual development. There were women poets like Apala, Viswavara, Ghosa and Lopamudra during the Rig Vedic period. Women could even attend the popular assemblies. There was no child marriage and the practice of sati was absent. Both men and women wore upper and lower garments made of cotton and wool. A variety of ornaments were used by both men and women. Wheat and barley, milk and its products like curd and ghee, vegetables and fruits were the chief articles of food. The eating of cow's meat

was prohibited since it was a sacred animal. Chariot racing, horse racing, dicing, music and dance were the favourite pastimes. The social divisions were not rigid during the Rig Vedic period as it was in the later Vedic period.

## Economic Condition

The Rig Vedic Aryans were pastoral people and their main occupation was cattle rearing. Their wealth was estimated in terms of their cattle. When they permanently settled in North India they began to practice agriculture. With the knowledge and use of iron they were able to clear forests and bring more lands under cultivation. Carpentry was another important profession and the availability of wood from the forests cleared made the profession profitable. Carpenters produced chariots and ploughs. Workers in metal made a variety of articles with copper, bronze and iron. Spinning was another important occupation and cotton and woolen fabrics were made. Goldsmiths were active in making ornaments. The potters made various kinds of vessels for domestic use.

Trade was another important economic activity and rivers served as important means of transport. Trade was conducted on barter system. In the later times, gold coins called nishka were used as media of exchange in large transactions.

## Religion

The Rig Vedic Aryans worshiped the natural forces like earth, fire, wind, rain and thunder. They personified these natural forces into many gods and worshipped them. The important Rig Vedic gods were Prithvi (Earth), Agni (Fire), Vayu (Wind), Varuna (Rain) and Indra (Thunder). Indra was the most popular among them during the early Vedic period. Next in importance to Indra was Agni who was regarded as an intermediary between the gods and people. Varuna was supposed to be the upholder of the natural order. There were also female gods like Aditi and Ushas. There were no temples and no idol worship during the early Vedic period. Prayers were offered to the gods in the expectation of rewards. Ghee, milk and grain were given as offerings. Elaborate rituals were followed during the worship.

## Later Vedic Period (1000 - 600 B.C.)

The Aryans further moved towards east in the Later Vedic Period. The Satapatha Brahmana refers to the expansion of Aryans to the eastern Gangetic plains. Several tribal groups and kingdoms are mentioned in the later Vedic literature. One important development during this period is the growth of large kingdoms. Kuru and Panchala kingdoms flourished in the beginning. Parikshat and Janamejaya were the famous rulers of Kuru kingdom. Pravahana Jaivali was a popular king of the Panchalas. He was a patron of learning. After the fall of Kurus and Panchalas, other kingdoms like Kosala, Kasi and Videha came into prominence. The famous ruler of Kasi was Ajatasatru. Janaka was the king of Videha with its capital at Mithila. His court was adorned by scholar Yajnavalkya. Magadha, Anga and Vanga seem to be the easternmost tribal kingdoms. The later Vedic texts also refer to the three divisions of India - Aryavarta (northern India), Madhyadesa (central India) and Dakshinapatha (southern India).

## Political Organization

Larger kingdoms were formed during the later Vedic period. Many *jana* or tribes were amalgamated to form *janapadas* or *rashtras* in the later Vedic period. Hence



the royal power had increased along with the increase in the size of kingdom. The king performed various rituals and sacrifices to strengthen his position. They include *Rajasuya* (consecration ceremony), *Asvamedha* (horse sacrifice) and *Vajpeya* (chariot race). The kings also assumed titles like *Rajavisvajanan*, *Ahlabhuvanapathi*, (lord of all earth), *Ekrat* and *Samrat* (sole ruler). In the later Vedic period, a large number of new officials were involved in the administration in addition to the existing *purohita*, *senani* and *gramani*. They include the treasury officer, tax collector and royal messenger. At the lower levels, the administration was carried on by the village assemblies. The importance of the *Samiti* and the *Sabha* had diminished during the later Vedic period.

### Economic Condition

Iron was used extensively in this period and this enabled the people to clear forests and to bring more land under cultivation. Agriculture became the chief occupation. Improved types of implements were used for cultivation. Besides barley, rice and wheat were grown. Knowledge of manure was another improvement. Industrial activity became more varied and there was greater specialization. Metal work, leather work, carpentry and pottery made great progress. In addition to internal trade, foreign trade became extensive. The Later Vedic people were familiar with the sea and they traded with countries like Babylon. A class of hereditary merchants (*vaniya*) came into existence. Vaisyas also carried on trade and commerce. They organized themselves into guilds known as *ganas*. Besides *nishka* of the Rig Vedic period, gold and silver coins like *satamana* and *krishnala* were used as media of exchange.

### Social Life

The four divisions of society (Brahmins, Kshatriyas, Vaisyas and Sudras) or the Varna system was thoroughly established during the Later Vedic period. The two higher classes - Brahmana, and Kshatriya enjoyed privileges that were denied to the Vaisya and Sudra. A Brahmin occupied a higher position than a Kshatriya but sometimes Kshatriyas claimed a higher status over the Brahmins. Many sub-castes on the basis of their occupation appeared in this period.

In the family, the power of the father increased during the Later Vedic period. There was no improvement in the status of women. They were still considered inferior and subordinate to men. Women also lost their political rights of attending assemblies. Child marriages had become common. According to the *Aitareya Brahmana* a daughter has been described as a source of misery. However, the women in the royal household enjoyed certain privileges.

### Religion

Gods of the Early Vedic period like Indra and Agni lost their importance. Prajapathi (the creator), Vishnu (the protector) and Rudra (the destroyer) became prominent during the Later Vedic period. Sacrifices were still important and the rituals connected with them became more elaborate. The importance of prayers declined and that of sacrifices increased. Priesthood became a profession and a hereditary one. The formulae for sacrifices were invented and elaborated by the priestly class. Therefore, towards the end of this period there was a strong reaction against priestly domination and against sacrifices and rituals. The rise of Buddhism and Jainism was the direct result of these elaborate sacrifices. Also, the authors of the Upanishads, which is

the essence of Hindu philosophy, turned away from the useless rituals and insisted on true knowledge (jnana) for peace and salvation.

## Chapter 4 Jainism And Buddhism

### Learning Objectives

*Students will acquire knowledge about*

1. The causes for the rise of Buddhism and Jainism.
2. Early life of Mahavira and his teachings.
3. Early life of Buddha and his teachings.
4. The spread of Buddhism.

5. Causes for the decline of Buddhism in India,

The sixth century B.C. is considered a wonderful century in history. Great thinkers like Buddha, Mahavira, Heraclitus, Zoroaster, Confucius and Lao Tse lived and preached their ideas in this century. In India, the republican institutions were strong in the 6<sup>th</sup> century B.C. This enabled rise of heterodox sects against the orthodox religion dominated by rites and rituals. Among them the most successful were Jainism and Buddhism whose impact on the Indian society was remarkable.

### Causes for the Rise of Jainism and Buddhism

The primary cause for the rise of Jainism and Buddhism was the religious unrest in India in the 6<sup>th</sup> century B.C. The complex rituals and sacrifices advocated in the Later Vedic period were not acceptable to the common people. The sacrificial ceremonies were also found to be too expensive. The superstitious beliefs and mantras confused the people. The teachings of Upanishads, an alternative to the system of sacrifices, were highly philosophical in nature and therefore not easily understood by all. Therefore, what was needed in the larger interests of the people was a simple, short and intelligible way to salvation for all people. Such religious teaching should also be in a language known to them. This need was fulfilled by the teachings of Buddha and Mahavira.

Other than the religious factor, social and economic factors also contributed to the rise of these two religions. The rigid caste system prevalent in India generated tensions in the society. Higher classes enjoyed certain privileges which were denied to the lower classes. Also, the Kshatriyas had resented the domination of the priestly class. It should also be noted that both Buddha and Mahavira belonged to Kshatriya origin. The growth of trade led to the improvement in the economic conditions of the Vaisyas. As a result, they wanted to enhance their social status but the orthodox Varna system did not allow this. Therefore, they began to extend support to Buddhism and Jainism. It was this merchant class that extended the chief support to these new religions.

### Jainism

#### Life of Vardhamana Mahavira (539- 467 B.C.)

Vardhamana Mahavira was the 24<sup>th</sup> Tirthankara of the Jain tradition. He was born at Kundagrama near Vaisali to Kshatriya parents Siddhartha and Trisala. He married Yasoda and gave birth to a daughter. At the age of thirty he became an ascetic and wandered for twelve years. In the 13<sup>th</sup> year of his penance, he attained the highest spiritual knowledge called Kevala Gnana. Thereafter, he was called Mahavira and Jina. His followers were called Jains and his religion Jainism. He preached his doctrines

for 30 years and died at the age of 72 at Pava near Rajagriha.

### Teachings of Mahavira

The three principles of Jainism, also known as Triratnas (three gems), are:

- right faith
- right knowledge
- right conduct.

Right faith is the belief in the teachings and wisdom of Mahavira. Right Knowledge is the acceptance of the theory that there is no God and that the world has been existing without a creator and that all objects possess a soul. Right conduct refers to the observance of the five great vows:

- not to injure life
- not to lie
- not to steal
- not to acquire property
- not to lead immoral life.

Both the clergy and laymen had to strictly follow the doctrine of *ahimsa*. Mahavira regarded all objects, both animate and inanimate, have souls and various degrees of consciousness. They possess life and feel pain when they are injured. Mahavira rejected the authority of the Vedas and objected to the Vedic rituals. He advocated a very holy and ethical code of life. Even the practice of agriculture was considered sinful as it causes injury to the earth, worms and animals. Similarly the doctrine of asceticism and renunciation was also carried to extreme lengths by the practice of starvation, nudity and other forms of self-torture.

### Spread of Jainism

Mahavira organised the *Sangha* to spread his teachings. He admitted both men and women in the *Sangha*, which consisted of both monks and lay followers. The rapid spread of Jainism was due to the dedicated work of the members of the *Sangha*. It spread rapidly in Western India and Karnataka. Chandragupta Maurya, Kharavela of Kalinga and the royal dynasties of south India such as the Gangas, the Kadambas, the Chalukyas and the Rashtrakutas patronized Jainism.

By the end of the fourth century B.C., there was a serious famine in the Ganges valley. Many Jain monks led by Bhadrabagu and Chandragupta Maurya came to Sravana Belgola in Karnataka. Those who stayed back in north India were led by a monk named Sthulabahu who changed the code of conduct for the monks. This led to the division of Jainism into two sects *Svetambaras* (white-clad) and *Digambaras* (Sky-clad or Naked). The first Jain Council was convened at Pataliputra by Sthulabahu, the leader of the Digambaras, in the beginning of the 3<sup>rd</sup> century B.C. The second Jain Council was held at Valabhi in 5<sup>th</sup> century A.D. The final compilation of Jain literature called Twelve Angas was completed in this council.

### Buddhism

#### Life of Gautama Buddha (567- 487 B.C.)

Gautama or Siddhartha, the founder of Buddhism, was born in 567 B.C. in Lumbini Garden near Kapilavastu. His father was Suddhodhana of the Sakya clan and mother Mayadevi. As his mother died at child birth, he was brought up by his aunt Prajapati Gautami. At the age of sixteen he married

Yasodhara and gave birth to a son, Rahula. The sight of an old man, a diseased man, a corpse and an ascetic turned him away from worldly life. He left home at the age of twenty nine in search of Truth. He wandered for seven years and met several teachers but could not get

enlightenment. At last, he sat under a *bodhi* tree at Bodhi Gaya and did intense penance, after which he got Enlightenment (Nirvana) at the age of thirty five. Since then he became known as the *Buddha* or 'the Enlightened One'. He delivered his first sermon at Sarnath near Benares and for the next forty five years he led the life of a preacher. He died at the age of eighty at Kusinagara.

The most important disciples of Buddha were Sariputta, Moggallanna, Ananda, Kassapa and Upali. Kings like Prasenajit of Kosala and Bimbisara and Ajatasatru of Magadha accepted his doctrines and became his disciples. Buddha in his lifetime spread his message far and wide in north India and visited places like Benares, Rajagriha, Sravasti, Vaisali, Nalanda and Pataligrama. It should be noted that he did not involve himself in fruitless controversies regarding metaphysical questions like god, soul, karma, rebirth, etc., and concerned himself with the practical problems confronting man.

### Teachings of Buddha

The Four Noble Truths of Buddha are:

- The world is full of suffering.
- The cause of suffering is desire.
- If desires are get rid off, suffering can be removed.
- This can be done by following the Eightfold Path.

The Eightfold Path consists of right view, right resolve, right speech, right conduct, right livelihood, right effort, right mindfulness and right concentration. Buddha neither accepts god nor rejects the existence of god. He laid great emphasis on the law of karma. He argued that the condition of man in this life depends upon his own deeds. He taught that the soul does not exist. However, he emphasized Ahimsa. By his love for human beings and all living creatures, he endeared himself to all. Even under the gravest provocation he did not show the least anger or hatred and instead conquered everyone by his love and compassion. His religion was identical with morality and it emphasized purity of thought, word and deed. He was a rationalist who tried to explain things in the light of reason and not on the basis of blind faith. Though he did not make a direct attack on the caste system, he was against any social distinctions and threw open his order to all. Therefore, Buddhism was more a social than religious revolution. It taught the code of practical ethics and laid down the principle of social equality.

### Spread of Buddhism

Buddha had two kinds of disciples - monks (bhikshus) and lay worshippers (upasikas). The monks were organized into the *Sangha* for the purpose of spreading his teachings. The membership was open to all persons, male or female and without any caste restrictions. There was a special code for nuns restricting their residence and movement. Sariputta, Moggallana and Ananda were some of the famous monks. The *Sangha* was governed on democratic lines and was empowered to enforce discipline among its members. Owing to the organised efforts made by the *Sangha*, Buddhism made rapid progress in North India even during Buddha's life time. Magadha, Kosala, Kausambi and several republican states of North India embraced this religion. About two hundred years after the death of Buddha, the famous Mauryan Emperor Asoka embraced Buddhism. Through his missionary effort Asoka spread Buddhism into West Asia and Ceylon. Thus a local religious sect was transformed into a world religion.

### Buddhist Councils

The first Buddhist Council was held at Rajagraha under the chairmanship of Mahakasapa immediately after the death of Buddha. Its purpose was to maintain the purity of the teachings of the Buddha. The second Buddhist Council was convened at Vaisali around 383 B.C. The third Buddhist Council was held at Pataliputra under the patronage of Asoka. Moggaliputta Tissa presided over it. The final version of Tripitakas was completed in this council. The fourth Buddhist Council was convened in Kashmir by Kanishka under the chairmanship of Vasumitra. Asvagosha participated in this council. The new school of Buddhism called Mahayana Buddhism came into existence during this council. The Buddhism preached by the Buddha and propagated by Asoka was known as *Hinayana*.

The Buddhist texts were collected and compiled some five hundred years after the death of the Buddha. They are known as the *Tripitakas*, namely the *Sutta*, the *Vinaya* and the *Abhidhamma Pitakas*. They are written in the Pali language.

### Causes for the Decline of Buddhism in India

The revival of Brahmanism and the rise of Bhagavatism led to the fall of popularity of Buddhism. The use of Pali, the language of the masses as the language of Buddhism was given up from the 1<sup>st</sup> century A.D. The Buddhists began to adopt Sanskrit, the language of the elite. After the birth of Mahayana Buddhism, the practice of idol worship and making offerings led to the deterioration of moral standards. Moreover, the attack of the Huns in 5<sup>th</sup> and 6<sup>th</sup> centuries and the Turkish invaders in 12<sup>th</sup> century destroyed the monasteries. All these factors contributed to the decline of Buddhism in India.

### Contribution of Buddhism to Indian Culture

Buddhism has made a remarkable contribution to the development of Indian culture.

- The concept of ahimsa was its chief contribution. Later, it became one of the cherished values of our nation.
- Its contribution to the art and architecture of India was notable. The stupas at Sanchi, Bharhut and Gaya are wonderful pieces of architecture. Buddhism takes the credit for the chaityas and viharas in different parts of India.
- It promoted education through residential universities like those at Taxila, Nalanda and Vikramasila.
- The language of Pali and other local languages developed through the teachings of Buddhism.

## Chapter 5 The Rise Of Magadha And Alexander's Invasion

### Learning Objectives

Students will acquire knowledge about

1. The rise of Magadha under the Haryanka, Saisunaga and Nanda dynasties.
2. The achievements of Bimbisara and Ajatasatru.
3. The Persian invasions and their impact.
4. Causes and course of Alexander's invasion.
5. Effects of Alexander's invasion.

In the beginning of the 6<sup>th</sup> century B.C., the northern India consisted of a large number of independent kingdoms. Some of them had monarchical forms of government, while some others were republics. While there was a concentration of monarchies on the

Gangetic plain, the republics were scattered in the foothills of the Himalayas and in northwestern India. Some of the republics consisted of only one tribe like the Sakyas, Licchavis and Mallas. In the republics, the power of decision in all matters of state vested with the Public Assembly which was composed of the tribal representatives or heads of families. All decisions were by a majority vote.

The Buddhist literature Anguttara Nikaya gives a list of sixteen great kingdoms called 'Sixteen Mahajanapadas'. They were Anga, Magadha, Kasi, Kosala, Vajji, Malla, Chedi, Vatsa, Kuru, Panchala, Matsya, Surasena, Asmaka, Avanti, Gandhara and Kambhoja. The Jain texts also contain references to the existence of sixteen kingdoms. In course of time, the small and weak kingdoms either submitted to the stronger rulers or gradually got eliminated. Finally in the mid 6<sup>th</sup> century B.C., only four kingdoms - Vatsa, Avanti, Kosala and Magadha survived.

### Vatsa

The Vatsa kingdom was situated on the banks of the river Yamuna. Its capital was Kausambi near modern Allahabad. Its most popular ruler was Udayana. He strengthened his position by entering into matrimonial alliances with Avanti, Anga and Magadha. After his death, Vatsa was annexed to the Avanti kingdom.

### Avanti

The capital of Avanti was Ujjain. The most important ruler of this kingdom was Pradyota. He became powerful by marrying Vasavadatta, the daughter of Udayana. He patronized Buddhism. The successors of Pradyota were weak and later this kingdom was taken over by the rulers of Magadha.

### Kosala

Ayodhya was the capital of Kosala. King Prasenajit was its famous ruler. He was highly educated. His position was further strengthened by the matrimonial alliance with Magadha. His sister was married to Bimbisara and Kasi was given to her as dowry. Subsequently there was a dispute with Ajatasatru. After the end of the conflict, Prasenajit married the daughter of Bimbisara. After the death of this powerful king, Kosala became part of the Magadha.

### Magadha

Of all the kingdoms of north India, Magadha emerged powerful and prosperous. It became the nerve centre of political activity in north India. Magadha was endowed by nature with certain geographical and strategic advantages. These made her to rise to imperial greatness. Her strategic position between the upper and lower part of the Gangetic valley was a great advantage. It had a fertile soil. The iron ores in the hills near Rajgir and copper and iron deposits near Gaya added to its natural assets. Her location at the centre of the highways of trade of those days contributed to her wealth. Rajagriha was the capital of Magadha. During the reign of Bimbisara and Ajatasatru, the prosperity of Magadha reached its zenith.

### Bimbisara (546 - 494 B.C.)

Bimbisara belonged to the Haryanka dynasty. He consolidated his position by matrimonial alliances. His first matrimonial alliance was with the ruling family of Kosala. He married Kosaladevi, sister of Prasenajit. He was given the Kasi region as dowry which yielded large revenue. Bimbisara married Chellana, a princess of the Licchavi family of Vaisali. This matrimonial alliance secured for him the safety of the northern frontier.



Moreover, it facilitated the expansion of Magadha northwards to the borders of Nepal. He also married Khema of the royal house of Madra in central Punjab. Bimbisara also undertook many expeditions and added more territories to his empire. He defeated Brahmadatta of Anga and annexed that kingdom. He maintained friendly relations with Avanti. He had also efficiently reorganized the administration of his kingdom. Bimbisara was a contemporary of both Vardhamana Mahavira and Gautama Buddha. However, both religions claim him as their supporter and devotee. He seems to have made numerous gifts to the Buddhist *Sangha*.

### **Ajatasatru (494 - 462 B.C.)**

The reign of Ajatasatru was remarkable for his military conquests. He fought against Kosala and Vaisali. His won a great success against a formidable confederacy led by the Lichchavis of Vaisali. This had increased his power and prestige. This war lasted for about sixteen years. It was at this time that Ajatasatru realised the strategic importance of the small village, Pataligrama (future Pataliputra). He fortified it to serve as a convenient base of operations against Vaisali. Buddhists and Jains both claim that Ajatasatru was a follower of their religion. But it is generally believed that in the beginning he was a follower of Jainism and subsequently embraced Buddhism. He is said to have met Gautama Buddha. This scene is also depicted in the sculptures of Barhut. According to the Mahavamsa, he constructed several *chaityas* and *viharas*. He was also instrumental in convening the First Buddhist Council at Rajagriha soon after the death of the Buddha. The immediate successor of Ajatasatru was Udayin. He laid the foundation of the new capital at Pataliputra situated at the confluence of the two rivers, the Ganges and the Son. Later it became famous as the imperial capital of the Mauryas. Udayin's successors were weak rulers and hence Magadha was captured by Saisunaga. Thus the Haryanka dynasty came to an end and the Saisunaga dynasty came to power.

### **Saisunaga dynasty**

The genealogy and chronology of the Saisunagas are not clear. Saisunaga defeated the king of Avanti which was made part of the Magadhan Empire. After Saisunaga, the mighty empire began to collapse. His successor was Kakavarman or Kalasoka. During his reign the second Buddhist Council was held at Vaisali. Kalasoka was killed by the founder of the Nanda dynasty.

### **Nandas**

The fame of Magadha scaled new heights under the Nanda dynasty. Their conquests went beyond the boundaries of the Gangetic basin and in North India they carved a well-knit and vast empire. Mahapadma Nanda was a powerful ruler of the Nanda dynasty. He uprooted the *kshatriya* dynasties in north India and assumed the title *ekarat*. The Puranas speak of the extensive conquests made by Mahapadma. The Hathigumpha inscription of Kharavela of Kalinga refers to the conquest of Kalinga by the Nandas. Many historians believe that a considerable portion of the Deccan was also under the control of the Nandas. Therefore, Mahapadma Nanda may be regarded as a great empire builder.

According to the Buddhist tradition, Mahapadma Nanda ruled about ten years. He was succeeded by his eight sons, who ruled successively. The last Nanda ruler was Dhana Nanda. He kept the Magadhan empire intact and possessed a powerful army and enormous wealth. The

fabulous wealth of the Nandas is also mentioned by several sources. The enormous wealth of the Nandas is also referred to in the Tamil Sangam work *Ahananuru* by the poet Mamulanar. The flourishing state of agriculture in the Nanda dominions and the general prosperity of the country must have brought to the royal treasury enormous revenue. The oppressive way of tax collection by Dhana Nanda was resented by the people. Taking advantage of this, Chandragupta Maurya and Kautilya initiated a popular movement against the Nanda rule. It was during this time that Alexander invaded India.

### **PERSIAN AND GREEK INVASIONS**

#### **Persian Invasions Cyrus (558 - 530 B.C)**

Cyrus the Great was the greatest conqueror of the Achaemenian Empire. He was the first conqueror who led an expedition and entered into India. He captured the Gandhara region. All Indian tribes to the west of the Indus river submitted to him and paid tribute. His son Cambyses had no time to pay attention towards India.

#### **Darius I (522 - 486 B.C.)**

Darius I, the grandson of Cyrus, conquered the Indus valley in 518 B.C. and annexed the Punjab and Sindh. This region became the 20<sup>th</sup> Satrapy of his empire. It was the most fertile and populous province of the Achaemenian Empire. Darius sent a naval expedition under Skylas to explore the Indus.

#### **Xerxes (465-456 B.C.)**

Xerxes utilized his Indian province to strengthen his position. He deployed Indian infantry and cavalry to Greece to fight his opponents. But they retreated after Xerxes faced a defeat in Greece. After this failure, the Achaemenians could not follow a forward policy in India. However, the Indian province was still under their control. Darius III enlisted Indian soldiers to fight against Alexander in 330 B.C. It is evident that the control of Persians slackened on the eve of Alexander's invasion of India.

#### **Effects of the Persian Invasion**

The Persian invasion provided an impetus to the growth of Indo-Iranian commerce. Also, it prepared the ground for Alexander's invasion. The use of the Kharoshthi script, a form of Iranian writing became popular in northwestern India and some of

Asoka's edicts were written in that script. We are able to see the influence of Persian art on the art of the Mauryas, particularly the monolithic pillars of Asoka and the sculptures found on them. The very idea of issuing edicts by Asoka and the wording used in the edicts are traced to Iranian influence. In short, the Iranian connection with India proved more fruitful than the short-lived Indo-Macedonian contact.

#### **Alexander's Invasion of India (327-325 B.C.)**

#### **Political Condition on the eve of Alexander's Invasion**

After two centuries of the Persian invasion, Alexander from Macedonia invaded India. On the eve of his invasion, there were a number of small kingdoms in northwestern India. The leading kings were Ambhi of Taxila, the ruler of Abhisara and Porus who ruled the region between the rivers of Jhelum and Chenab. There were many republican states like Nysa. In short, the northwestern India remained the most disunited part of India and the rulers were fighting with one another. They never come together against common enemy. Yet,

it was not easy for Alexander to overcome so many sources of opposition.

### Causes of the Invasion

Alexander ascended the throne of Macedonia after the death of his father Philip in 334 B.C. He conquered the whole of Persia by defeating Darius III in the battle of Arbela in 330 B.C. He also aimed at further conquest eastwards and wanted to recover the lost Persian Satrapy of India. The writings of Greek authors like Herodotus about the fabulous wealth of India attracted Alexander. Moreover, his interest in geographical enquiry and love of natural history urged him to undertake an invasion of India. He believed that on the eastern side of India there was the continuation of the sea, according to the geographical knowledge of his period. So, he thought that by conquering India, he would also conquer the eastern boundary of the world.

### Battle of Hydaspes

In 327 B.C. Alexander crossed the Hindukush Mountains and spent nearly ten months in fighting with the tribes. He crossed the Indus in February 326 B.C. with the help of the bridge of boats. He was warmly received by Ambhi, the ruler of Taxila. From there Alexander sent a message to Porus to submit. But Porus refused and decided to fight against Alexander. Then Alexander marched from Taxila to the banks of the river Hydaspes (Jhelum). On the other side of the river he saw the vast army of Porus. As there were heavy floods in the river, Alexander was not able to cross it. After a few days, he crossed the river and the famous battle of Hydaspes was fought on the plains of Karri. It was a well-contested battle. Although Porus had a strong army, he lost the battle. Alexander was impressed by the courage and heroism of this Indian prince, treated him generously and reinstated him on his throne. Alexander continued his march as far as the river Beas encountering opposition from the local tribes. He wanted to proceed still further eastwards towards the Gangetic valley. But he could not do so because his soldiers refused to fight. Hardships of prolonged warfare made them tired and they wanted to return home. Alexander could not persuade them and therefore decided to return. He made arrangements to look after his conquered territories in India. He divided the whole territory from the Indus to the Beas into three provinces and put them under his governors. His retreat began in October 326 B.C. and the return journey was not free from ordeals. Many republican tribes attacked his army. Anyhow he managed to reach beyond the Indus. On his way he reached Babylon where he fell seriously ill and died in 323 B.C.

### Effects of Alexander's invasion

The immediate effect of Alexander's invasion was that it encouraged political unification of north India under the Mauryas. The system of small independent states came to an end. Alexander's invasion had also paved the way for direct contact between India and Greece. The routes opened by him and his naval explorations increased the existing facilities for trade between India and West Asia. However, his aim of annexing the northwestern India to his empire was not fulfilled due to his premature death. His authority in the Indus valley was a short-lived one because of the expansion of Mauryan Empire under Chandragupta Maurya.

## Chapter 6 The Mauryan Empire

### Learning Objectives

*Students will acquire knowledge about*

1. The sources for the study of the Mauryas.
2. Chandragupta Maurya and his achievements.
3. Asoka and his achievements and the spread of Asoka's Dhamma.
4. The salient features of the Mauryan administration.
5. Art and architecture of the Mauryas.
6. Causes for the decline of the Mauryan empire.

The foundation of the Mauryan Empire opens a new era in the history of India. For the first time, the political unity was achieved in India. Moreover, the history writing has also become clear from this period due to accuracy in chronology and sources. Besides plenty of indigenous and foreign literary sources, a number of epigraphical records are also available to write the history of this period.

### Literary Sources Kautilya's Arthashastra

This book in Sanskrit was written by Kautilya, a contemporary of Chandragupta Maurya. Kautilya was also called 'Indian Machiavelli'. The manuscript of Arthashastra was first discovered by R. Shama Sastri in 1904. The Arthashastra contains 15 books and 180 chapters but it can be divided into three parts: the first deals with the king and his council and the departments of government; the second with civil and criminal law; and the third with diplomacy and war. It is the most important literary source for the history of the Mauryas.

### Visakadatta's Mudrarakshasa

The Mudrarakshasa written by Visakadatta is a drama in Sanskrit. Although written during the Gupta period, it describes how Chandragupta with the assistance of Kautilya overthrew the Nandas. It also gives a picture on the socio-economic condition under the Mauryas.

### Megasthenes' Indica

Megasthenes was the Greek ambassador in the court of Chandragupta Maurya. His book Indica has survived only in fragments. Yet, his account gives details about the Mauryan administration, particularly the administration of the capital city of Pataliputra and also the military organization. His picture on contemporary social life is notable. Certain unbelievable information provided by him has to be treated with caution.

### Other Literature

Apart from these three important works, the Puranas and the Buddhist literature such as Jatakas provide information on the Mauryas. The Ceylonese Chronicles Dipavamsa and Mahavamsa throw light on the role Asoka in spreading Buddhism in Sri Lanka.

### Archaeological Sources

#### Edicts of Asoka

The inscriptions of Asoka were first deciphered by James Princep in 1837. They are written in Pali language and in some places Prakrit was used. The Brahmi script was employed for writing. In the northwestern India Asokan inscriptions were found in Karoshti script. There are fourteen Major Rock Edicts. The two Kalinga Edicts are found in the newly conquered territory. The major pillar Edicts were erected in important cities. There are minor Rock Edicts and minor pillar Edicts. These Edicts of Asoka deal with Asoka's Dhamma and also instructions given to his officials. The XIII Rock Edict gives details about his war with Kalinga. The Pillar Edict VII gives a summary of his efforts to promote the

Dhamma within his kingdom. Thus the Asokan inscriptions remain valuable sources for the study of Asoka and the Mauryan Empire.

## **POLITICAL HISTORY OF THE MAURYAS**

### **Chandragupta Maurya (322 - 298 B.C.)**

Chandragupta Maurya was the founder of the Mauryan Empire. He, at the young age of 25, captured Pataliputra from the last ruler of the Nanda dynasty, Dhanananda. In this task he was assisted by Kautilya, who was also known as Chanakya or Vishnugupta. After firmly establishing his power in the Gangetic valley, he marched to the northwest and subdued the territories up to the Indus. Then he moved to central India and occupied the region north of Narmada river.

In 305 B.C., he marched against Selukus Niketar, who was Alexander's General controlling the northwestern India. Chandragupta Maurya defeated him and a treaty was signed. By this treaty, Selukus Niketar ceded the trans-Indus territories - namely Aria, Arakosia and Gedrosia - to the Mauryan Empire. He also gave his daughter in marriage to the Mauryan prince.

Chandragupta made a gift of 500 elephants to Selukus. Megasthenes was sent to the Mauryan court as Greek ambassador.

Chandragupta embraced Jainism towards the end of his life and stepped down from the throne in favour of his son Bindusara. Then he went to Sravana Belgola, near Mysore along with Jain monks led by Bhadrabahu and starved himself to death.

### **Bindusara (298 - 273 B.C.)**

Bindusara was called by the Greeks as "Amitragatha" meaning slayer of enemies. He is said to have conquered the Deccan up to Mysore. Taranatha, the Tibetan monk states that Bindusara conquered 16 states comprising 'the land between the two seas'. The Sangam Tamil literature also confirms the Mauryan invasion of the far south. Therefore, it can be said that the Mauryan Empire under Bindusara extended up to Mysore. Bindusara received Deimachus as ambassador from the Syrian king Antiochus I. Bindusara wrote to Antiochus I asking for sweet wine, dried figs and a sophist. The latter sent all but a sophist because the Greek law prohibited sending a sophist. Bindusara supported the Ajivikas, a religious sect. Bindusara appointed his son Asoka as the governor of Ujjain.

### **Asoka the Great (273 - 232 B.C.)**

There is little information regarding the early life of Asoka. He acted as Governor of Ujjain and also suppressed a revolt in Taxila during his father Bindusara's reign. There was an interval of four years between Asoka's accession to the throne (273 B.C.) and his actual coronation (269 B.C.). Therefore, it appears from the available evidence that there was a struggle for the throne after Bindusara's death. The Ceylonese Chronicles, Dipavamsa and Mahavamsa state that Asoka captured power after killing his ninety nine brothers including his elder brother Susima. The youngest brother Tissa was spared. But according to Taranatha of Tibet, Asoka killed only six of his brothers. Asoka's Edict also refers to his brothers acting as officers in his administration. However, it is clear that the succession of Asoka was a disputed one.

The most important event of Asoka's reign was his victorious war with Kalinga in 261 B.C. Although there is no detail about the cause and course of the war, the effects of the war were described by Asoka himself in

the Rock edict XIII: "A hundred and fifty thousand were killed and many times that number perished..." After the war he annexed Kalinga to the Mauryan Empire. Another most important effect of the Kalinga war was that Asoka embraced Buddhism under the influence of Buddhist monk, Upagupta.

### **Asoka and Buddhism**

According to some scholars, his conversion to Buddhism was gradual and not immediate. About 261 B.C. Asoka became a Sakya Upasaka (lay disciple) and two and a half years later, a Bikshu (monk). Then he gave up hunting, visited Bodhi-Gaya, and organized missions. He appointed special officers called Dharma Mahamatras to speed up the progress of Dhamma. In 241 B.C., he visited the birth place of Buddha, the Lumbini Garden, near Kapilavastu. He also visited other holy places of Buddhism like Sarnath, Sravasti and Kusinagara. He sent a mission to Sri Lanka under his son Mahendra and daughter Sangamitra who planted there the branch of the original Bodhi tree. Asoka convened the Third Buddhist Council at Pataliputra in 240 B.C. in order to strengthen the *Sangha*. It was presided over by Moggaliputta Tissa.

### **Extent of Asoka's Empire**

Asoka's inscriptions mention the southernmost kingdoms - Cholas, Pandyas, Satyaputras and Keralaputras - as border-states. Therefore these states remained outside the Mauryan Empire. According to Rajatarangini, Kashmir was a part of the Mauryan Empire. Nepal was also within the Mauryan empire. The northwestern frontier was already demarcated by Chandragupta Maurya.

### **Asoka's Dhamma**

Although Asoka embraced Buddhism and took efforts to spread Buddhism, his policy of Dhamma was a still broad concept. It was a way of life, a code of conduct and a set of principles to be adopted and practiced by the people at large. His principles of Dhamma were clearly stated in his Edicts. The main features of Asoka's Dhamma as mentioned in his various Edicts may be summed as follows:

1. Service to father and mother, practice of ahimsa, love of truth, reverence to teachers and good treatment of relatives.
  2. Prohibition of animal sacrifices and festive gatherings and avoiding expensive and meaningless ceremonies and rituals.
  3. Efficient organization of administration in the direction of social welfare and maintenance of constant contact with people through the system of Dhammayatras.
  4. Humane treatment of servants by masters and prisoners by government officials.
  5. Consideration and non-violence to animals and courtesy to relations and liberality to Brahmins.
  6. Tolerance among all the religious sects.
  7. Conquest through Dhamma instead of through war.
- The concept of non-violence and other similar ideas of Asoka's Dhamma are identical with the teachings of Buddha. But he did not equate Dhamma with Buddhist teachings. Buddhism remained his personal belief. His Dhamma signifies a general code of conduct. Asoka wished that his Dhamma should spread through all social levels.

### **Estimate of Asoka**

Asoka was "the greatest of kings" surpassing Alexander the Great and Julius Caesar and other renowned



Emperors of the world. According to H.G. Wells "Amidst the tens and thousands of names of monarchs that crowd the columns of history, the name of Asoka shines and shines almost alone, a star". Asoka was true to his ideals. He was not a dreamer but a man of practical genius. His Dhamma is so universal that it appeals to humanity even today. He was an example in history for his benevolent administration and also for following the policy of non-aggression even after his victory in the war. His central ideal was to promote the welfare of humanity.

### Later Mauryas

Asoka's death in 232 B.C. was followed by the division of the Mauryan Empire into two parts - western and eastern. The western part was ruled by Kunala, son of Asoka and the eastern part by Dasaratha, one of the grand sons of Asoka. Due to the Bactrian invasions, the western part of the empire collapsed. The eastern part was intact under Samprati successor of Dasaratha. The last Mauryan king was Brihadratha, who was assassinated by Pushyamitra Sunga.

### Mauryan Administration Central Government

The ascendancy of the Mauryas had resulted in the triumph of monarchy in India. Other systems like republics and oligarchies that were prevalent in the pre-Mauryan India had collapsed. Although Kautilya the foremost political theorist of ancient India supported the monarchical form of government, he did not stand for royal absolutism. He advocated that the king should take the advice of his ministry in running the administration. Therefore, a council of ministers called Mantriparishad assisted the king in administrative matters. It consisted of Purohita, Mahamantri, Senapati and Yuvaraja. There were civil servants called Amatya to look after the day-to-day administration. These officers were similar to the IAS officers of independent India. The method of selection of Amatas was elaborately given by Kautilya. Asoka appointed Dhamma Mahamatras to supervise the spread of Dhamma. Thus the Mauryan state had a well organized civil service.

### Revenue Department

Samharta, the chief of the Revenue Department, was in charge of the collection of all revenues of the empire. The revenues came from land, irrigation, customs, shop tax, ferry tax, forests, mines and pastures, license fee from craftsmen, and fines collected in the law courts. The land revenue was normally fixed as one sixth of the produce. The main items of expenditure of the state related to king and his household, army, government servants, public works, poor relief, religion, etc.

### Army

The Mauryan army was well organized and it was under the control of Senapati. The salaries were paid in cash. Kautilya refers to the salaries of different ranks of military officers. According to Greek author Pliny, the Mauryan army consisted of six lakh infantry, thirty thousand cavalry, nine thousand elephants and eight thousand chariots. In addition to these four wings, there were the Navy and Transport and Supply wings. Each wing was under the control of Adyakhshas or Superintendents. Megasthenes mentions six boards of five members each to control the six wings of the military.

### Department of Commerce and Industry

This department had controlled the retail and wholesale prices of goods and tried to ensure their steady supply through its officers called Adyakhshas. It also controlled weights and measures, levied custom duties and regulated foreign trade.

### Judicial and Police Departments

Kautilya mentions the existence of both civil and criminal courts. The chief justice of the Supreme Court at the capital was called Dharmathikarin. There were also subordinate courts at the provincial capitals and districts under Amatyas. Different kinds of punishment such as fines, imprisonment, mutilation and death were given to the offenders. Torture was employed to extract truth. Police stations were found in all principal centres. Both Kautilya and Asoka's Edicts mention about jails and jail officials. The Dhamma Mahamatras were asked by Asoka to take steps against unjust imprisonment. Remission of sentences is also mentioned in Asoka's inscriptions.

### Census

The taking of Census was regular during the Mauryan period. The village officials were to number the people along with other details like their caste and occupation. They were also to count the animals in each house. The census in the towns was taken by municipal officials to track the movement of population both foreign and indigenous. The data collected were cross checked by the spies. The Census appears to be a permanent institution in the Mauryan administration.

### Provincial and Local Administration

The Mauryan Empire was divided into four provinces with their capitals at Taxila, Ujjain, Suvarnagiri and Kalinga. The provincial governors were mostly appointed from the members of royal family. They were responsible for the maintenance of law and order and collection of taxes for the empire. The district administration was under the charge of Rajukas, whose position and functions are similar to modern collectors. He was assisted by Yuktas or subordinate officials. Village administration was in the hands of Gramani and his official superior was called Gopa who was in charge of ten or fifteen villages.

Both Kautilya and Megasthenes provided the system of Municipal administration. Arthashastra contains a full chapter on the role of Nagarika or city superintendent. His chief duty was to maintain law and order. Megasthenes refers to the six committees of five members each to look after the administration of Pataliputra. These committees looked after: 1. Industries 2. Foreigners 3. Registration of birth and deaths 4. Trade 5. Manufacture and sale of goods 6. Collection of sales tax.

### Mauryan Art and Architecture

The monuments before the period of Asoka were mostly made of wood and therefore perished. The use of stone started from the time of Asoka. Even of the numerous monuments of Asoka, only a few have remained. His palace and monasteries and most of his stupas have disappeared. The only remaining stupa is at Sanchi. The artistic remains of the Mauryan period can be seen in the following heads:

### Pillars

The pillars erected by Asoka furnish the finest specimen of the Mauryan art. Asoka's pillars with inscriptions were found in places like Delhi, Allahabad, Rummindei, Sanchi and Saranath. Their tops were crowned with figures of animals like lion, elephant and bull. The

Saranath pillar with four lions standing back to back is the most magnificent. The Indian government adopted this capital with some modifications as its state emblem.

### Stupas

Asoka built a number of stupas throughout his empire but majority of them were destroyed during foreign invasions. Only a few have survived. The best example is the famous Sanchi stupa with massive dimensions. It was originally built with bricks but later enlarged after the time of Asoka.

### Caves

The caves presented to the Ajivikas by Asoka and his son Dasaratha remain important heritage of the Mauryas. Their interior walls are polished like mirror. These were meant to be residences of monks. The caves at Barabar hills near Bodh Gaya are wonderful pieces of Mauryan architecture.

### Causes for the Decline of the Mauryas

The causes for the decline of the Mauryan empire have been widely debated by scholars. The traditional approach attributes the decline to Asoka's policies and his weak successors. Another approach holds the inadequate political and economic institutions to sustain such a vast empire.

It was said that Asoka's pro-Buddhist policies antagonized the Brahmins who brought about a revolution led by Pushyamitra Sunga. But Asoka was never acted against Brahmins. That Asoka's policy of non-violence reduced the fighting spirit of his army was another charge against him. But Asoka had never slackened his control over his empire despite following a pacifist policy. Therefore solely blaming Asoka for the decline of the Mauryan empire may not be correct because Asoka was more a pragmatist than an idealist.

## Chapter 7 Post-Mauryan India

### Learning Objectives

*Students will acquire knowledge about*

1. The Sunga rule and its importance.
2. The Satavahana rule and their contributions to culture.
3. The Sakas and Bactrians.
4. Kanishka and his achievements.
5. Gandhara art and its salient features.

After the death of Asoka, his successors were not able to keep the vast Mauryan Empire intact. The provinces started declaring their independence. The northwest India slipped out of the control of the Mauryas and a series of foreign invasions affected this region. Kalinga declared its independence and in the further south the Satavahanas established their independent rule. As a result, the Mauryan rule was confined to the Gangetic valley and it was soon replaced by the Sunga dynasty.

### Sungas

The founder of the Sunga dynasty was Pushyamitra Sunga, who was the commander-in-chief under the Mauryas. He assassinated the last Mauryan ruler and usurped the throne. The most important challenge to the Sunga rule was to protect north India against the invasions of the Bactrian Greeks from the northwest. The Greeks advanced up to Pataliputra and occupied it for sometime. However, Pushyamitra succeeded in regaining the lost territory. He also fought a campaign against Kharavela of Kalinga who invaded north India.

Pushyamitra was a staunch follower of Brahmanism. He performed two asvamedha sacrifices. Buddhist sources refer him as a persecutor of Buddhism. But there is enough evidence to show that Pushyamitra patronised Buddhist art. During his reign the Buddhist monuments at Bharhut and Sanchi were renovated and further improved.

After the death of Pushyamitra, his son Agnimitra became the ruler. The last Sunga ruler was Devabhuti, who was murdered by his minister Vasudeva Kanva, the founder of the Kanva dynasty. The Kanva dynasty ruled for 45 years. After the fall of the Kanvas, the history of Magadha was a blank until the establishment of the Gupta dynasty.

The rule of the Sungas was important because they defended the Gangetic valley from foreign invasions. In the cultural sphere, the Sungas revived Brahmanism and horse sacrifice. They also promoted the growth of Vaishnavism and the Sanskrit language. In short, the Sunga rule was a brilliant anticipation of the golden age of the Guptas.

### Satavahanas

In the Deccan, the Satavahanas established their independent rule after the decline of the Mauryas. Their rule lasted for about 450 years. They were also known as the Andhras. The Puranas and inscriptions remain important sources for the history of Satavahanas.

Among the inscriptions, the Nasik and Nanaghad inscriptions throw much light on the reign of Gautamiputra Satakarni. The coins issued by the Satavahanas are also helpful in knowing the economic conditions of that period.

The founder of the Satavahana dynasty was Simuka. He was succeeded by Krishna, who extended the kingdom up to Nasik in the west. The third king was Sri Satakarni. He conquered western Malwa and Berar. He also performed asvamedha sacrifices. The seventeenth king of the Satavahana dynasty was Hala. He reigned for a period of five years. Hala became famous for his book Gathasaptasati, also called Sattasai. It contains 700 verses in Prakrit language.

The greatest ruler of the Satavahana dynasty was Gautamiputra Satakarni. He ruled for a period of 24 years from 106 to 130 A.D. His achievements were recorded in the Nasik inscription by his mother Gautami Balasri. Gautamiputra Satakarni captured the whole of Deccan and expanded his empire. His victory over Nagapana, the ruler of Malwa was remarkable. He patronized Brahmanism. Yet, he also gave donations to Buddhists.

Gautamiputra Satakarni was succeeded by his son Vashishtaputra Pulamayi. He extended the Satavahana power up to the mouth of the Krishna river. He issued coins on which the image of ships was inscribed. They reveal the naval power and maritime trade of the Satavahanas. The last great ruler of Satavahanas was Yajna Sri Satakarni.

### Economic Condition

There was a remarkable progress in the fields of trade and industry during the Satavahana rule. Merchants organized guilds to increase their activities. The craft guilds organized by different craftsmen such as potters, weavers and oil pressers also came into existence. Silver coins called Karshapanas were used for trade. The Satavahana period also witnessed overseas commercial activity. Ptolemy mentions many ports in the Deccan. The greatest port of the Satavahanas was Kalyani on the

west Deccan. Gandakasela and Ganjam on the east coast were the other important seaports.

### Cultural Contributions

The Satavahanas patronized Buddhism and Brahmanism. They built chaityas and viharas. They also made grants of villages and lands to Buddhist monks. Vashishtaputra Pulamayi repaired the old Amaravathi stupa. Their architecture in Nagarjunakonda was also notable. Brahmanism was revived by the Satavahanas along with the performance of asvamedha and rajasuya sacrifices. They also patronized the Prakrit language and literature. Hala's Sattasai is an excellent piece of Prakrit literature.

### Foreign Invasions of Northwest India

#### Bactrians

Bactria and Parthia became independent from the Syrian empire in the middle of the third century B.C. Demetrius, the Greek ruler of Bactria invaded Afghanistan and Punjab and occupied them. From Taxila, he sent two of his commanders, Appolodotus and Menander for further conquests. Appolodotus conquered the Sindh and marched up to Ujjain. Menander extended his rule up to Mathura and from there he made attempts to capture Pataliputra. But he was stopped by the army of Vasumitra, the grandson of Pushyamitra Sunga. Menander was also known as Milinda and the capital of his kingdom was Sakala (Sialkot). He evinced much interest in Buddhism and his dialogues with the Buddhist monk Nagasena was compiled in the Pali work, Milindapanho (Questions of Milinda). He also embraced Buddhism. A Greek ambassador Heliodorus became a Vaishnavite and erected the Garuda Pillar at Besnagar. The Greek influence in India lasted for more than a century after the death Menander.

#### Sakas

The Sakas or the Scythians attacked Bactria and Parthia and captured them from the Greek rulers. Following the footsteps of the Greeks, the Sakas gradually extended their rule over northwestern India. There were two different groups of Sakas - the Northern Satraps ruling from Taxila and the Western satraps ruling over Maharashtra.

The founder the Saka rule in India in the first century B.C. was Maues. His son and successor was Azes I, who was considered to be the founder of the Vikrama era. Sakas rulers of Taxila were overthrown by the Parthians.

#### Kushanas

The Kushanas were a branch of Yuchi tribe, whose original home was central Asia. They first came to Bactria displacing the Sakas. Then they gradually moved to the Kabul valley and seized the Gandhara region. The founder of the Kushana dynasty was Kujula Kadphises or Kadphises I. He occupied the Kabul valley and issued coins in his name. His son Wima Kadphises or Kadphises II conquered the whole of northwestern India as far as Mathura. He issued gold coins with high-sounding titles like the 'Lord of the Whole World'. He was a devotee of Lord Siva.

#### Kanishka (78 - 120 A.D.)

Kanishka was the most important ruler of the Kushana dynasty. He was the founder of the Saka era which starts from 78 A.D. He was not only a great conqueror but also a patron of religion and art.

#### Kanishka's Conquests

At the time of his accession his empire included Afghanistan, Gandhara, Sind and Punjab. Subsequently he conquered Magadha and extended his power as far as Pataliputra and Bodh Gaya. According to Kalhana, Kanishka invaded Kashmir and occupied it. His coins are found in many places like Mathura, Sravasti, Kausambi and Benares and therefore, he must have conquered the greater part of the Gangetic plain. He also fought against the Chinese and acquired some territories from them. During the first expedition he was defeated by the Chinese general Pancho. He undertook a second expedition in which he was successful and he scored a victory over Panyang, the son of Pancho. Kanishka annexed the territories of Kashgar, Yarkand and Khotan into his empire.

The empire of Kanishka was a vast one extending from Gandhara in the west to Benares in the east, and from Kashmir in the north to Malwa in the south. His capital was Purushapura or modern day Peshawar. Mathura was another important city in his empire.

#### Kanishka and Buddhism

Kanishka embraced Buddhism in the early part of his reign. However, his coins exhibit the images of not only Buddha but also Greek and Hindu gods. It reflects the Kanishka's toleration towards other religions. In the age of Kanishka the Mahayana Buddhism came into vogue. It is different in many respects from the religion taught by the Buddha and propagated by Asoka. The Buddha came to be worshipped with flowers, garments, perfumes and lamps. Thus image worship and rituals developed in Mahayana Buddhism.

Kanishka also sent missionaries to Central Asia and China for the propagation of the new faith. Buddhist chaityas and viharas were built in different places. He patronised Buddhist scholars like Vasumitra, Asvagosha and Nagarjuna. He also convened the Fourth Buddhist Council to discuss matters relating to Buddhist theology and doctrine. It was held at the Kundalavana monastery near Srinagar in Kashmir under the presidency of Vasumitra. About 500 monks attended the Council. The Council prepared an authoritative commentary on the Tripitakas and the *Mahayana* doctrine was given final shape. Asvagosha was a great philosopher, poet and dramatist. He was the author of Buddhacharita. Nagarjuna from south India adorned the court of Kanishka. The famous physician of ancient India Charaka was also patronized by him.

#### Gandhara Art

The home of the Gandhara school of art is the territory in and around Peshawar in northwestern India. The best of the Gandhara sculpture was produced during the first and second centuries A.D. It originated during the reign of Indo-Greek rulers but the real patrons of this school of art were the Sakas and the Kushanas, particularly Kanishka. Gandhara art was a blend of Indian and Graeco-Roman elements. Specimens of Gandhara sculpture have been found in Taxila, Peshawar and in several places of northwest India. The Gandhara school made sculptures of the Buddha in various sizes, shapes and postures. The reliefs depict Buddha's birth, his renunciation and his preaching. The salient features of Gandhara art are:

- Moulding human body in a realistic manner with minute attention to physical features like muscles, moustache and curly hair.
- Thick drapery with large and bold fold lines.
- Rich carving, elaborate ornamentation and symbolic expressions.



- The main theme was the new form of Buddhism - Mahayanism
  - and the evolution of an image of Buddha.
- A large number of monasteries were also built from first to fourth centuries A.D. Ruins of about fifteen monasteries were found in and around Peshawar and Rawalpindi. The Buddhist stupas erected during this period had Graeco-Roman architectural impact. The height of the stupa was raised and ornamentation was added to the structure of the stupa. These changes made the stupa more attractive.

### Mathura School of Art

The school of art that developed at Mathura in modern Uttar Pradesh is called the Mathura art. It flourished in the first century A.D. In its early phase, the Mathura school of art developed on indigenous lines. The Buddha images exhibit the spiritual feeling in his face which was largely absent in the Gandhara school. The Mathura school also carved out the images of Siva and Vishnu along with their consorts Parvathi and Lakshmi. The female figures of yakshinis and apsaras of the Mathura school were beautifully carved.

### Successors of Kanishka and end of Kushana Rule

The successors of Kanishka ruled for another one hundred and fifty years. Huvishka was the son of Kanishka and he kept the empire intact. Mathura became an important city under his rule. Like Kanishka he was also a patron of Buddhism. The last important Kushana ruler was Vasudeva. The Kushana empire was very much reduced in his rule. Most of his inscriptions are found in and around Mathura. He seems to have been a worshipper of Siva. After Vasudeva, petty Kushan princes ruled for sometime in northwestern India.

## Chapter 8 Sangam Age

### Learning Objectives

Students will acquire knowledge about

1. The Sangam literature and other sources for the Sangam period.
  2. The political history of the Sangam period.
  3. The Sangam polity and society.
  4. Religion and the position of women in the Sangam period.
  5. The economic condition of the Sangam age.
- The Sangam Age constitutes an important chapter in the history of South India. According to Tamil legends, there existed three Sangams (Academy of Tamil poets) in ancient Tamil Nadu popularly called Muchchangam. These Sangams flourished under the royal patronage of the Pandyas. The first Sangam, held at Then Madurai, was attended by gods and legendary sages but no literary work of this Sangam was available. The second Sangam was held at Kapadapuram but the all the literary works had perished except *Tolkappiyam*. The third Sangam at Madurai was founded by Mudathirumaran. It was attended by a large number of poets who produced voluminous literature but only a few had survived. These Tamil literary works remain useful sources to reconstruct the history of the Sangam Age.

### Sangam Literature

The corpus of Sangam literature includes *Tolkappiyam*, *Ettutogai*, *Pattuppattu*, *Pathinenkilkanakku*, and the two epics - *Silappathigaram* and *Manimegalai*.

*Tolkappiyam* authored by Tolkappiyar is the earliest of the Tamil literature. It is a work on Tamil grammar but it provides information on the political and socio-economic conditions of the Sangam period. The *Ettutogai* or Eight Anthologies consist of eight works *Aingurunooru*, *Narrinai*, *Aganaooru*, *Purananooru*, *Kuruntogai*, *Kalittogai*, *Paripadal* and *Padirrupattu*. The *Pattuppattu* or Ten Idylls consist of ten works - *Thirumurugarrupadai*, *Porunararrupadai*, *Sirupanarrupadai*, *Perumpanarrupadai*, *Mullaippattu*, *Nedunalvadai*, *Maduraikkanni*, *Kurinjippattu*, *Pattinappalai* and *Malaipadukadam*. Both *Ettutogai* and *Pattuppattu* were divided into two main groups - *Aham* (love) and *Puram* (valour). *Pathinenkilkanakku* contains eighteen works mostly dealing with ethics and morals. The most important among them is *Tirukkural* authored by Thiruvalluvar. *Silappathigaram* written by Elango Adigal and *Manimegalai* by Sittalai Sattanar also provides valuable information on the Sangam polity and society.

### Other Sources

In addition to the Sangam literature, the Greek authors like Megasthenes, Strabo, Pliny and Ptolemy mention the commercial contacts between the West and South India. The Asokan inscriptions mention the Chera, Chola and Pandya rulers on the south of the Mauryan empire. The Hathikumbha inscription of Kharavela of Kalinga also mentions about Tamil kingdoms. The excavations at Arikamedu, Poompuhar, Kodumanal and other places reveal the overseas commercial activities of the Tamils.

### Period of Sangam Literature

The chronology of the Sangam literature is still a disputed topic among the scholars. The sheet anchor of Sangam chronology lies in the fact that Gajabahu II of Sri Lanka and Chera

Senguttuvan of the Chera dynasty were contemporaries. This is confirmed by *Silappathigaram* as well as the *Dipavamsa* and *Mahavamsa*. Also the Roman coins issued by Roman emperors of the first century A.D were found in plenty in various places of Tamil Nadu. Therefore, the most probable date of the Sangam literature has been fixed between the third century B.C. to third century A.D. on the basis of literary, archaeological and numismatic evidences.

### Political History

The Tamil country was ruled by three dynasties namely the Chera, Chola and Pandyas during the Sangam Age. The political history of these dynasties can be traced from the literary references.

### Cheras

The Cheras ruled over parts of modern Kerala. Their capital was Vanji and their important seaports were Tondi and Musiri. They had the palmyra flowers as their garland. The Pugalur inscription of the first century A.D refers to three generations of Chera rulers.

*Padirrupattu* also provides information on Chera kings. Perum Sorru Udhiyan Cheralathan, Imayavaramban Nedum Cheralathan and Chera Senguttuvan were the famous rulers of this dynasty. Chera Senguttuvan belonged to 2<sup>nd</sup> century A.D. His younger brother was Elango Adigal, the author of *Silappathigaram*. Among his military achievements, his expedition to the Himalayas was remarkable. He defeated many north Indian monarchs. Senguttuvan introduced the Pattini cult or the worship of Kannagi as the ideal wife in Tamil Nadu. The stone for making the

idol of Kannagi was brought by him after his Himalayan expedition. The consecration ceremony was attended by many princes including Gajabhagu II from Sri Lanka. The Chola kingdom of the Sangam period extended from modern Tiruchi district to southern Andhra Pradesh. Their capital was first located at Uraiyur and then shifted to Puhar. Karikala was a famous king of the Sangam Cholas. *Pattinappalai* portrays his early life and his military conquests. In the Battle of Venni he defeated the mighty confederacy consisting of the Cheras, Pandyas and eleven minor chieftains. This event is mentioned in many Sangam poems. Vahaipparandalai was another important battle fought by him in which nine enemy chieftains submitted before him. Karikala's military achievements made him the overlord of the whole Tamil country. Trade and commerce flourished during his reign period. He was responsible for the reclamation of forest lands and brought them under cultivation thus adding prosperity to the people. He also built Kallanai across the river Kaveri and also constructed many irrigation tanks.

### Pandyas

The Pandyas ruled over the present day southern Tamil Nadu. Their capital was Madurai. The earliest kings of the Pandyan dynasty were Nediyan, Palyagasalai Mudukudumi Peruvaludhi and Mudathirumaran. There were two Neduncheliyans. The first one was known as Aryappadai Kadantha Neduncheliyan (one who won victories over the Aryan forces). He was responsible for the execution of Kovalan for which Kannagi burnt Madurai. The other was Talaiyalanganattu Cheruvenra (He who won the battle at Talaiyalanganam) Neduncheliyan. He was praised by Nakkirar and Mangudi Maruthanar. He wore this title after defeating his enemies at the Battle of Talaiyalanganam, which is located in the Tanjore district. By this victory Neduncheliyan gained control over the entire Tamil Nadu. *Maduraikkanji* written by Mangudi Maruthanar describes the socio-economic condition of the Pandya country including the flourishing seaport of Korkai. The last famous Pandyan king was Uggira Peruvaludhi. The Pandyan rule during the Sangam Age began to decline due to the invasion of the Kalabhras.

### Minor Chieftains

The minor chieftains played a significant role in the Sangam period. Among them Pari, Kari, Ori, Nalli, Pegan, Ay and Adiyaman were popular for their philanthropy and patronage of Tamil poets. Therefore, they were known as Kadai Yelu Vallalgal. Although they were subordinate to the Chera, Chola and Pandya rulers, they were powerful and popular in their respective regions.

### Sangam Polity

Hereditary monarchy was the form of government during the Sangam period. The king had also taken the advice of his minister, court-poet and the imperial court or avai. The Chera kings assumed titles like Vanavaramban, Vanavan, Kuttuvan, Irumporai and Villavar, the Chola kings like Senni, Valavan and Killi and the Pandya kings Thennavar and Minavar. Each of the Sangam dynasties had a royal emblem - carp for the Pandyas, tiger for the Cholas and bow for the Cheras. The imperial court or avai was attended by a number of chiefs and officials. The king was assisted by a large body of officials who were divided into five councils. They were ministers (amaichar), priests (anthanar), military commanders (senapathi), envoys (thuthar) and spies (orrrar). The military administration was also

efficiently organized during the Sangam Age. Each ruler had a regular army and their respective Kodimaram (tutelary tree).

Land revenue was the chief source of state's income while custom duty was also imposed on foreign trade. The Pattinappalai refers to the custom officials employed in the seaport of Puhar. Booty captured in wars was also a major income to the royal treasury. Roads and highways were well maintained and guarded night and day to prevent robbery and smuggling.

### Sangam Society

Tolkappiyam refers to the five-fold division of lands - Kurinji (hilly tracks), Mullai (pastoral), Marudam (agricultural), Neydal (coastal) and Palai (desert). The people living in these five divisions had their respective chief occupations as well as gods for worship.

- Kurinji - chief deity was Murugan - chief occupation, hunting and honey collection.
- Mullai - chief deity Mayon (Vishnu) - chief occupation, cattle-rearing and dealing with dairy products.
- Marudam - chief deity Indira - chief occupation, agriculture.

- Neydal - chief deity Varunan - chief occupation fishing and salt manufacturing.
- Palai - chief deity Korravai - chief occupation robbery.

Tolkappiyam also refers to four castes namely arasar, anthanar, vanigar and vellalar. The ruling class was called arasar. Anthanars played a significant role in the Sangam polity and religion. Vanigars carried on trade and commerce. The vellalas were agriculturists. Other tribal groups like Parathavar, Panar, Eyinar, Kadambar, Maravar and Pulaiyar were also found in the Sangam society. Ancient primitive tribes like Thodas, Irulas, Nagas and Vedars lived in this period.

### Religion

The primary deity of the Sangam period was Seyon or Murugan, who is hailed as Tamil God. The worship of Murugan was having an ancient origin and the festivals relating to God Murugan was mentioned in the Sangam literature. He was honoured with six abodes known as Arupadai Veedu. Other gods worshipped during the Sangam period were Mayon (Vishnu), Vendan (Indiran), Varunan and Korravai. The Hero Stone or Nadu Kal worship was significant in the Sangam period. The Hero Stone was erected in memory of the bravery shown by the warrior in battle. Many hero stones with legends inscribed on them were found in different parts of Tamil Nadu. This kind of worshipping the deceased has a great antiquity.

### Position of Women

There is a plenty of information in the Sangam literature to trace the position of women during the Sangam age. Women poets like Avvaiyar, Nachchellaiyar, and Kakkaiyapadiyiar flourished in this period and contributed to Tamil literature. The courage of women was also appreciated in many poems. Karpu or Chaste life was considered the highest virtue of women. Love marriage was a common practice. Women were allowed to choose their life partners. However, the life of widows was miserable. The practice of Sati was also prevalent in the higher strata of society. The class of dancers was patronized by the kings and nobles.

### Fine Arts

Poetry, music and dancing were popular among the people of the Sangam age. Liberal donations were given to poets by the kings, chieftains and nobles. The royal courts were crowded with singing bards called Panar

and Viraliyar. They were experts in folk songs and folk dances. The arts of music and dancing were highly developed. A variety of Yazhs and drums are referred to in the Sangam literature. Dancing was performed by Kanigaiyar. Koothu was the most popular entertainment of the people.

### Economy of the Sangam Age

Agriculture was the chief occupation. Rice was the common crop. Ragi, sugarcane, cotton, pepper, ginger, turmeric, cinnamon and a variety of fruits were the other crops. Jack fruit and pepper were famous in the Chera country. Paddy was the chief crop in the Chola and Pandya country.

The handicrafts of the Sangam period were popular. They include weaving, metal works and carpentry, ship building and making of ornaments using beads, stones and ivory. There was a great demand for these products, as the internal and external trade was at its peak during the Sangam period. Spinning and weaving of cotton and silk clothes attained a high quality. The poems mention the cotton clothes as thin as a cloud of steam or a slough of a snake. There was a great demand in the western world for the cotton clothes woven at Uraiyur. Both internal and foreign trade was well organized and briskly carried on in the Sangam Age. The Sangam literature, Greek and Roman accounts and the archaeological evidences provide detailed information on this subject. Merchants carried the goods on the carts and on animal-back from place to place. Internal trade was mostly based on the barter system. External trade was carried between South India and the Greek kingdoms. After the ascendancy of the Roman Empire, the Roman trade assumed importance. The port city of Puhar became an emporium of foreign trade, as big ships entered this port with precious goods. Other ports of commercial activity include Tondi, Musiri, Korkai, Arikamedu and Marakkanam. The author of *Periplus* provides the most valuable information on foreign trade. Plenty of gold and silver coins issued by the Roman Emperors like Augustus, Tiberius and Nero were found in all parts of Tamil Nadu. They reveal the extent of the trade and the presence of Roman traders in the Tamil country. The main exports of the Sangam age were cotton fabrics, spices like pepper, ginger, cardamom, cinnamon and turmeric, ivory products, pearls and precious stones. Gold, horses and sweet wine were the chief imports.

### End of the Sangam Age

## Chapter 9

### Gupta Empire

#### Learning Objectives

Students will acquire knowledge about

1. The sources for the study of Guptas.
2. Samudragupta's achievements.
3. The achievements of Chandragupta II.
4. The importance of Fahien's visit to India.
5. Gupta administration, society and economy.
6. Literature, art, architecture and scientific development during the Gupta period.

#### Sources

There are plenty of source materials to reconstruct the history of the Gupta period. They include literary, epigraphical and numismatic sources. The *Puranas* throw light on the royal genealogy of the Gupta kings.

Contemporary literary works like the *Devichandraguptam* and the *Mudhrakshasam* written by Visakadatta provide information regarding the rise of the Guptas. The Chinese traveler Fahien, who visited India during the reign of Chandragupta II, has left a valuable account of the social, economic and religious conditions of the Gupta empire.

Apart from these literary sources, there are inscriptions like the Meherauli Iron Pillar Inscription and the Allahabad Pillar inscription. The first refers to the achievements of Chandragupta I. The most important source for the reign of Samudragupta is the Allahabad Pillar inscription. It describes his personality and achievements. This inscription is engraved on an Asokan pillar. It is written in classical Sanskrit, using the Nagari script. It consists of 33 lines composed by Harisena. It describes the circumstances of Samudragupta's accession, his military campaigns in north India and the Deccan, his relationship with other contemporary rulers, and his accomplishments as a poet and Allahabad Pillar scholar.

#### Inscription

The coins issued by Gupta kings contain legends and figures. These coins provide interesting details about the titles and sacrifices performed by the Gupta monarchs.

### Chandragupta I (320 - 330 A.D.)

The founder of the Gupta dynasty was Sri Gupta. He was succeeded by Ghatotkacha. These two were called *Maharajas*. Much information was not available about their rule. The next ruler was Chandragupta I and he was the first to be called *Maharajadhiraja* (the great king of kings). This title indicates his extensive conquests. He strengthened his position by a matrimonial alliance with the Licchavis. He married Kumaradevi, a princess of that family. This added to the power and prestige of the Gupta family. The Meherauli Iron Pillar inscription mentions his extensive conquests. Chandragupta I is considered to be the founder of the Gupta era which starts with his accession in A.D. 320.

### Samudragupta (330-380 A.D.)

Samudragupta was the greatest of the rulers of the Gupta dynasty. The Allahabad Pillar inscription provides a detailed account of his reign. It refers to three stages in his military campaign:

1. Against some rulers of North India
2. His famous *Dakshinapatha* expedition against South Indian rulers
3. A second campaign against some other rulers of North India.

In the first campaign Samudragupta defeated Achyuta and Nagasena. Achyuta was probably a Naga ruler. Nagasena belonged to the Kota family which was ruling over the upper Gangetic valley. They were defeated and their states were annexed. As a result of this short campaign, Samudragupta had gained complete mastery over the upper Gangetic valley.

Then Samudragupta marched against the South Indian monarchs. The Allahabad Pillar inscription mentions that Samudragupta defeated twelve rulers in his South Indian Expedition. They were Mahendra of Kosala, Vyaghraraja of Mahakanthara, Mantaraja of Kaurala, Mahendragiri of Pishtapura, Swamidatta of Kottura, Damana of Erandapalla, Vishnugupta of Kanchi, Nilaraja of Avamukta, Hastivarman of Vengi, Ugrasena of Palakka, Kubera of Devarashtra and Dhananjaya of Kushtalapura. Samudragupta's policy in South India was different. He did not destroy and annex those kingdoms.



Instead, he defeated the rulers but gave them back their kingdoms. He only insisted on them to acknowledge his suzerainty.

The third stage of Samudragupta's campaign was to eliminate his remaining north Indian rivals. He fought against nine kings, uprooted them and annexed their territories. They were Rudradeva, Matila, Nagadatta, Chandravarman, Ganapathinaga, Nagasena, Achyuta, Nandin and Balavarman. Most of these rulers were members of the Naga family, then ruling over different parts of north India.

After these military victories, Samudragupta performed the *asvamedha* sacrifice. He issued gold and silver coins with the legend 'restorer of the *asvamedha*'. It is because of his military achievements Samudragupta was hailed as 'Indian Napoleon'.

### Extent of Samudragupta's Empire

After these conquests, Samudragupta's rule extended over the upper Gangetic valley, the greater part of modern U.P., a portion of central India and the southwestern part of Bengal. These territories were directly administered by him. In the south there were tributary states. The Saka and Kushana principalities on the west and northwest were within the sphere of his influence. The kingdoms on the east coast of the Deccan, as far as the Pallava Kingdom, acknowledged his suzerainty.

### Estimate of Samudragupta

Samudragupta's military achievements remain remarkable in the annals of history. He was equally great in his other personal accomplishments. The Allahabad Pillar inscription speaks of his magnanimity to his foes, his polished intellect, his poetic skill and his proficiency in music. It calls him Kaviraja because of his ability in composing verses. His image depicting him with Veena is found in the coins issued by him. It is the proof of his proficiency and interest in music. He was also a patron of many poets and scholars, one of whom was Harisena. Thus he must be credited with a share in the promotion of Sanskrit literature and learning, characteristic of his dynasty. He was an ardent follower of Vaishnavism but was tolerant of other creeds. He evinced keen interest in Buddhism and was the patron of the great Buddhist scholar Vasubandhu.

### Chandragupta II (380-415 A.D.)

Samudragupta was succeeded by his son Chandragupta II Vikramaditya. But according to some scholars, the immediate successor of Samudragupta was Ramagupta, the elder brother of Chandragupta II. But there is little historical proof for this. Chandragupta II inherited the military genius of his father and extended the Gupta Empire by his own conquests.

He achieved this by a judicious combination of the policy of diplomacy and warfare. Through matrimonial alliances he strengthened his political power. He married Kubera, a Naga princess of central India. He gave his daughter Prabhavati in marriage to the Vakataka prince Rudrasena II. The political importance of this marriage lies in the fact that the Vakatakas occupied a geographically strategic position in the Deccan. This alliance served a useful purpose when Chandragupta-II undertook his campaign in western India against the Sakas.

### Conquest of Western India

The greatest of the military achievements of Chandragupta II was his war against the Saka *satraps* of western India. Rudrasimha III, the last ruler of the Saka

*satrap* was defeated, dethroned and killed. His territories in western Malwa and the Kathiawar Peninsula were annexed into the Gupta Empire. After this victory he performed the horse sacrifice and assumed the title *Sakari*, meaning, 'destroyer of Sakas'. He also called himself *Vikramaditya*.

As a result of the conquest of western India, the western boundary of the Empire reached to the Arabian Sea gaining access to Broach, Sopara, Cambay and other sea ports. This enabled the Gupta empire to control trade with the western countries. Ujjain became an important commercial city and soon became the alternative capital of the Guptas. The fine cotton clothes of Bengal, Indigo from Bihar, silk from Banares, the scents of the Himalayas and the sandal and species from the south were brought to these ports without any interference. The western traders poured Roman gold into India in return for Indian products. The great wealth of the Gupta Empire was manifest in the variety of gold coins issued by Chandragupta II.

### Other Conquests

Chandragupta II defeated a confederacy of enemy chiefs in Vanga. He also crossed the river Sindh and conquered Bactria. The Kushanas ruling in this region were subdued by him. With these conquests, the Gupta empire extended in the west as far as western Malwa, Gujarat and Kathiawar. In the northwest it extended beyond the Hindukush up to Bactria. In the east, it included even eastern Bengal and in the south the Narmada river formed the boundary.

### Fahien's Visit

The famous Chinese pilgrim, Fahien visited India during the reign of Chandragupta II. Out of his nine years stay in India, he spent six years in the Gupta empire. He came to India by the land route through Khotan, Kashgar, Gandhara and Punjab. He visited Peshawar, Mathura, Kanauj, Sravasti, Kapilavastu, Kusinagara, Pataliputra, Kasi and Bodhi Gaya among other places. He returned by the sea route, visiting on the way Ceylon and Java. The main purpose of his visit was to see the land of the Buddha and to collect Buddhist manuscripts from India. He stayed in Pataliputra for three years studying Sanskrit and copying Buddhist texts.

Fahien provides valuable information on the religious, social and economic condition of the Gupta empire. According to him, Buddhism was in a flourishing condition in the northwestern India but in the Gangetic valley it was in a state of neglect. He refers to the Gangetic valley as the 'land of Brahmanism'. Fahien mentions the unsatisfactory state of some of the Buddhist holy places like Kapilavastu and Kusinagara. According to him the economic condition of the empire was prosperous.

Although his account is valuable in many respects, he did not mention the name of Chandragupta II. He was not interested in political affairs. His interest was primarily religion. He assessed everything from the Buddhist angle. His observations on social conditions are found to be exaggerated. Yet, his accounts are useful to know the general condition of the country.

### Estimate of Chandragupta II

The power and glory of Gupta empire reached its peak under the rule Chandragupta II Vikramaditya. He also contributed to the general cultural progress of the age and patronized great literary figures like Kalidasa. He promoted artistic activity. Because of the high level of cultural progress that was achieved during this period, the Gupta period is generally referred to as a golden age.

A detailed account of the cultural progress in the Gupta age is given below.

### Successors of Chandragupta II

Kumaragupta was the son and successor of Chandragupta II. His reign was marked by general peace and prosperity. He issued a number of coins and his inscriptions are found all over the Gupta empire. He also performed an *asvamedha* sacrifice. Most importantly, he laid the foundation of the Nalanda University which emerged an institution of international reputation. At the end of his reign, a powerful wealthy tribe called the 'Pushyamitras' defeated the Gupta army. A branch of the Huns from Central Asia made attempts to cross the Hindukush mountains and invade India. But it was his successor Skandagupta who really faced the Hun invasion. He fought successfully against the Huns and saved the empire. This war must have been a great strain on the government's resources. After Skandagupta's death, many of his successors like Purugupta, Narasimhagupta, Buddhagupta and Baladitya could not save the Gupta empire from the Huns. Ultimately, the Gupta power totally disappeared due to the Hun invasions and later by the rise of Yasodharman in Malwa.

### Gupta Administration

According to inscriptions, the Gupta kings assumed titles like *Paramabhattaraka*, *Maharajadhiraja*, *Parameswara*, *Samrat* and *Chakravartin*. The king was assisted in his administration by a council consisting of a chief minister, a Senapati or commander-in-chief of the army and other important officials. A high official called *Sandivigraha* was mentioned in the Gupta inscriptions, most probably minister for foreign affairs. The king maintained a close contact with the provincial administration through a class of officials called *Kumaramatyas* and *Ayuktas*. Provinces in the Gupta Empire were known as *Bhuktis* and provincial governors as *Uparikas*. They were mostly chosen from among the princes. *Bhuktis* were subdivided into *Vishyas* or districts. They were governed by *Vishyapatis*. *Nagara Sreshtis* were the officers looking after the city administration. The villages in the district were under the control of *Gramikas*.

Fahien's account on the Gupta administration provides useful information. He characterises the Gupta administration as mild and benevolent. There were no restrictions on people's movements and they enjoyed a large degree of personal freedom. There was no state interference in the individual's life. Punishments were not severe. Imposing a fine was a common punishment. There was no spy system. The administration was so efficient that the roads were kept safe for travelers, and there was no fear of thieves. He mentioned that people were generally prosperous and the crimes were negligible. Fahien had also appreciated the efficiency of the Gupta administration as he was able to travel without any fear throughout the Gangetic valley. On the whole the administration was more liberal than that of the Mauryas.

### Social Life

The pre-Gupta period in India witnessed a series of foreign invasions. Indian society had given way to those foreigners who had become permanent residents here. But during the Gupta period, the caste system became rigid. The Brahmins occupied the top ladder of the society. They were given enormous gifts by the rulers as well as other wealthy people. The practice of untouchability had slowly begun during this period.

Fahien mentions that Chandalas were segregated from the society. Their miserable condition was elaborated by the Chinese traveler.

The position of women had also become miserable during the Gupta period. They were prohibited from studying the religious texts like the Puranas. The subjection of women to men was thoroughly regularized. But it was insisted that they should be protected and generously treated by men. The practice of *Swayamvara* was given up and the Manusmriti suggested the early marriage for girls.

In the sphere of religion, Brahmanism reigned supreme during the Gupta period. It had two branches - Vaishnavism and Saivism. Most of the Gupta kings were Vaishnavites. They performed *Asvamedha* sacrifices. The worship of images and celebration of religious festivals with elaborate rituals made these two religions popular. Religious literature like the Puranas was composed during this period. The progress of Brahmanism led to the neglect of Buddhism and Jainism. Fahien refers to the decline of Buddhism in the Gangetic valley. But a few Buddhist scholars like Vasubandhu were patronized by Gupta kings. In western and southern India Jainism flourished. The great Jain Council was held at Valabhi during this period and the Jain Canon of the Svetambars was written.

The Gupta period witnessed a tremendous progress in the field of art, science and literature and on account of this it has been called "a golden age". A few scholars even call this period a period of renaissance. But it should be remembered that there was no dark period before the Gupta rule. Therefore the cultural progress witnessed during the Gupta period may be called the culmination of Indian intellectual activities.

### Art and Architecture

**In the history of Indian art and architecture, the Gupta period occupies an important place. Both the Nagara and Dravidian styles of art evolved during this period. But most of the architecture of this period had been lost due to foreign invasions like that of Huns. Yet, the remaining temples, sculptures and cave paintings provide an idea about the grandeur of the Gupta art.**

The temple at Deogarh near Jhansi and the sculptures in the temple at Garhwas near Allahabad remain important specimen of the Gupta art. There was no influence of Gandhara style. But the beautiful statue of standing Buddha at Mathura reveals a little Greek style. The Buddha statue unearthed at Saranath was unique piece of Gupta art. The Bhitari monolithic pillar of Skandagupta is also remarkable.

Metallurgy had also made a wonderful progress during the Gupta period. The craftsmen were efficient in the art of casting metal statues and pillars. The gigantic copper statue of Buddha, originally found at Sultanganj now kept at Birmingham museum, was about seven and a half feet height and nearly a ton weight. The Delhi Iron pillar of the Gupta period is still free from rust though completely exposed to sun and rain for so many centuries.

The paintings of the Gupta period are seen at Bagh caves near Gwalior. The mural paintings of Ajantha mostly illustrate the life of the Buddha as depicted in the Jataka stories. The paintings at Sigiriya in Sri Lanka were highly influenced by the Ajantha style.

The Gupta coinage was also remarkable. Samudragupta issued eight types of gold coins. The legends on them throw much light on the achievements of that marvelous

king. The figures inscribed on them are illustrative of the skill and greatness of Gupta numismatic art. Chandragupta II and his successors had also issued gold, silver and copper coins of different varieties.

### Literature

The Sanskrit language became prominent during the Gupta period. Nagari script had evolved from the Brahmi script. Numerous works in classical Sanskrit came to be written in the forms of epic, lyrics, drama and prose. The best of the Sanskrit literature belonged to the Gupta age.

Himself a great poet, Samudragupta patronized a number of scholars including Harisena. The court of Chandragupta II was adorned by the celebrated Navratnas. Kalidasa remain the foremost among them. His master-piece was the Sanskrit drama *Shakuntala*. It is considered one among the 'hundred best books of the world'. He wrote two other plays - the *Malavikagnimitra* and *Vikramorvasiya*. His two well-known epics are *Raghuvamsa* and *Kumarasambhava*. *Ritusamhara* and *Meghaduta* are his two lyrics. Visakadatta was another celebrated author of this period. He was the author of two Sanskrit dramas, *Mudrarakshasa* and *Devichandraguptam*. Sudraka was a renowned poet of this age and his book *Mrichchakatika* is rich in humour and pathos. Bharavi's *Kirtanjuniya* is the story of the conflict between Arjuna and Siva. Dandin was the author of *Kavyadarsa* and *Dasakumaracharita*. Another important work of this period was *Vasavadatta* written by Subhandhu. The *Panchatantra* stories were composed by Vishnusarma during the Gupta period. The Buddhist author Amarasingha compiled a lexicon called *Amarakosa*. The Puranas in their present form were composed during this period. There are eighteen Puranas. The most important among them are the *Bhagavatha*, *Vishnu*, *Vayu* and *Matsya* Puranas. The Mahabharata and the Ramayana were given final touches and written in the present form during this period.

### Science

The Gupta period witnessed a brilliant activity in the sphere of mathematics, astronomy, astrology and medicine. Aryabhatta was a great mathematician and astronomer. He wrote the book *Aryabhatiya* in 499 A.D. It deals with mathematics and astronomy. It explains scientifically the occurrence of solar and lunar eclipses. Aryabhatta was the first to declare that the earth was spherical in shape and that it rotates on its own axis. However, these views were rejected by later astronomers like Varahamihira and Brahmagupta. Varahamihira composed *Pancha Siddhantika*, the five astronomical systems. He was also a great authority on astrology. His work *Brihadsamhita* is a great work in Sanskrit literature. It deals with a variety of subjects like astronomy, astrology, geography, architecture, weather, animals, marriage and omens. His *Brihadjataka* is considered to be a standard work on astrology. In the field of medicine, Vagbhata lived during this period. He was the last of the great medical trio of ancient India. The other two scholars Charaka and Susruta lived before the Gupta age. Vagbhata was the author *Ashtangasangraha* (Summary of the eight branches of medicine).

Students will acquire knowledge about

1. Sources for the study of Harsha.
2. The early life of Harsha.
3. The military activities of Harsha.
4. Harsha's contribution to Buddhism.
5. Nalanda University.

The decline of the Gupta Empire was followed by a period of political disorder and disunity in North India. It was only in the beginning of the seventh century A.D. that Harshvardhana succeeded in establishing a larger kingdom in north India.

The chief sources for tracing the history of Harsha and his times are the *Harshacharita* written by Bana and the Travel accounts of Hiuen Tsang. Bana was the court poet of Harsha. Hiuen Tsang was the Chinese traveler who visited India in the seventh century A.D. Besides these two sources, the dramas written by Harsha, namely *Ratnavali*, *Nagananda* and *Priyadarsika* also provide useful information. The Madhuben plate inscription and the Sonpat inscription are also helpful to know the chronology of Harsha. The Banskhera inscription contains the signature of Harsha.

### Early Life of Harsha

The founder of the family of Harsha was Pushyabhuti. Pushyabhutis were the feudatories of the Guptas. They called themselves *Vardhanas*. After the Hun invasions they assumed independence. The first important king of Pushyabhuti dynasty was Prabhakaravardhana. His capital was Thaneswar, north of Delhi. He assumed the title Maharajadhiraja and Paramabhataraka. After Prabhakaravardhana's death, his elder son Rajyavardhana came to the throne. He had to face problems right from the time of his accession. His sister, Rajyasri had married the Maukhari ruler called Grihavarman. The ruler of Malwa, Devagupta in league with Sasanka, the ruler of Bengal had killed Grihavarman. Immediately on hearing this news, Rajyavardhana marched against the king of Malwa and routed his army. But before he could return to his capital, he was treacherously murdered by Sasanka. In the meantime, Rajyasri escaped into forests. Harsha now succeeded his brother at Thaneswar. His first responsibility was to rescue his sister and to avenge the killings of his brother and brother-in-law. He first rescued his sister when she was about to immolate herself.

### Harsha's Military Conquests

In his first expedition, Harsha drove out Sasanka from Kanauj. He made Kanauj his new capital. This made him the most powerful ruler of north India. Harsha fought against Dhruvasena II of Valabhi and defeated him. Dhruvasena II became a vassal.

The most important military campaign of Harsha was against the Western Chalukya ruler Pulakesin II. Both the accounts of Hiuen Tsang and the inscriptions of Pulakesin II provide the details of this campaign. Harsha with an ambition to extend his kingdom south of the Narmada river marched against the Chalukya ruler. But the Aihole inscription of Pulakesin II mentions the defeat of Harsha by Pulakesin, who after this achievement assumed the title *Paramesvara*. Hiuen Tsang's accounts also confirm the victory of Pulakesin. Harsha led another campaign against the ruler of Sindh, which was an independent kingdom. But, it is doubtful whether his Sind campaign was a successful one. Nepal had accepted Harsha's overlordship. Harsha established his control over Kashmir and its ruler sent tributes to him. He also maintained cordial relations with

## Chapter 10

### Harshavardhana (606 - 647 A.D.)

#### Learning Objectives



Bhaskaravarman, the ruler of Assam. Harsha's last military campaign was against the kingdom of Kalinga in Orissa and it was a success.

Thus Harsha established his hold over the whole of north India. The regions modern Rajasthan, Punjab, Uttar Pradesh, Bihar and Orissa were under his direct control. But his sphere of influence was much more extensive. The peripheral states such as Kashmir, Sind, Valabhi and Kamarupa acknowledged his sovereignty.

### Harsha and Buddhism

In his early life, Harsha was a devout Saiva but later he became an ardent Hinayana Buddhist. Hiuen Tsang converted him to Mahayana Buddhism. Harsha prohibited the use of animal food in his kingdom and punished those who kill any living being. He erected thousands of stupas and established travellers' rests all over his kingdom. He also erected monasteries at the sacred places of Buddhists.

Once in five years he convened a gathering of representatives of all religions and honoured them with gifts and costly presents. He brought the Buddhist monks together frequently to discuss and examine the Buddhist doctrine.

### Kanauj Assembly

Harsha organized a religious assembly at Kanauj to honour the Chinese pilgrim Hiuen Tsang towards the close of his reign. He invited representatives of all religious sects. It was attended by 20 kings, 1000 scholars from the Nalanda University, 3000 Hinayanists and Mahayanists, 3000 Brahmins and Jains. The Assembly went on continuously for 23 days. Hiuen Tsang explained the values of Mahayana doctrine and established its superiority over others. However, violence broke out and there were acts of arson. There was also an attempt on the life of Harsha. Soon, it was brought under control and the guilty were punished. On the final day of the Assembly, Hiuen Tsang was honoured with costly presents.

### Allahabad Conference

Hiuen Tsang mentions in his account about the conference held at Allahabad, known as Prayag. It was the one among the conferences routinely convened by Harsha once in five years. Harsha gave away his enormous wealth as gifts to the members of all religious sects. According to Hiuen Tsang, Harsha was so lavish that he emptied the treasury and even gave away the clothes and jewels he was wearing. His statement might be one of admiring exaggeration.

### Harsha's Administration

The administration of Harsha was organized on the same lines as the Guptas did. Hiuen Tsang gives a detailed picture about this. The king was just in his administration and punctual in discharging his duties. He made frequent visits of inspection throughout his dominion. The day was too short for him. Taxation was also light and forced labour was also rare. One sixth of the produce was collected as land tax. Cruel punishments of the Mauryan period continued in the times of Harsha. Hiuen Tsang condemned the trials as barbarous and superstitious. Harsha's army consisted of the traditional four divisions - foot, horse, chariot and elephant. The number of cavalry was more than one lakh and the elephants more than sixty thousands. This was much more than that of the Mauryan army. The maintenance of public records was the salient feature of Harsha's administration. The archive of the Harsha period was known as *nilopitu* and it was under the

control of special officers. Both good and bad events happened during his time had been recorded.

### Society and Economy under Harsha

Both Bana and Hiuen Tsang portray the social life in the times of Harsha. The fourfold division of the society - Brahmin, Kshatriya, Vysya and Sudra - was prevalent. The Brahmins were the privileged section of the society and they were given land grants by the kings. The Kshatriyas were the ruling class. The Vysyas were mainly traders. Hiuen Tsang mentions that the Sudras practiced agriculture. There existed many sub castes. The position of women was not satisfactory. The institution of Swyamvara (the choice of choosing her husband) had declined. Remarriage of widows was not permitted, particularly among the higher castes. The system of dowry had also become common. The practice of sati was also prevalent. Hiuen Tsang mentions three ways of disposal of the dead - cremation, water burial and exposure in the woods. The trade and commerce had declined during Harsha's period. This is evident from the decline of trade centres, less number of coins, and slow activities of merchant guilds. The decline of trade in turn affected the handicrafts industry and agriculture. Since there was no large scale demand for goods, the farmers began to produce only in a limited way. This led to the rise of self-sufficient village economy. In short, there was a sharp economic decline as compared to the economy of the Gupta period.

### Cultural Progress

The art and architecture of Harsha's period are very few and mostly followed the Gupta style. Hiuen Tsang describes the glory of the monastery with many storeys built by Harsha at Nalanda. He also speaks of a copper statue of Buddha with eight feet in height. The brick temple of Lakshmana at Sirpur with its rich architecture is assigned to the period of Harsha. Harsha was a great patron of learning. His biographer Banabhatta adorned his royal court. Besides *Harshacharita*, he wrote *Kadambari*. Other literary figures in Harsha's court were Matanga Divakara and the famous Barthrihari, who was the poet, philosopher and grammarian. Harsha himself authored three plays - *Ratnavali*, *Priyadarsika* and *Nagananda*. Harsha patronised the Nalanda University by his liberal endowments. It attained international reputation as a centre of learning during his reign. Hiuen Tsang visited the Nalanda University and remained as a student for some time.

### Nalanda University

The Chinese travelers of ancient India mentioned a number of educational institutions. The most famous among them were the Hinayana University of Valabhi and the Mahayana University of Nalanda. Hiuen Tsang gives a very valuable account of the Nalanda University. The term Nalanda means "giver of knowledge". It was founded by Kumaragupta I during the Gupta period. It was patronised by his successors and later by Harsha. The professors of the University were called *panditas*. Some of its renowned professors were Dingnaga, Dharmapala, Sthiramati and Silabadhra. Dharmapala was a native of Kanchipuram and he became the head of the Nalanda University. Nalanda University was a residential university and education was free including the boarding and lodging. It was maintained with the revenue derived from 100 to 200 villages endowed by different rulers. Though it was a Mahayana University, different religious subjects like

the Vedas, Hinayana doctrine, Sankhya and Yoga philosophies were also taught. In addition to that, general subjects like logic, grammar, astronomy, medicine and art were in the syllabus. It attracted students not only from different parts of India but from different countries of the east. Admission was made by means of an entrance examination. The entrance test was so difficult that not more than thirty percent of the candidates were successful. Discipline was very strict. More than lectures, discussion played an important part and the medium of instruction was Sanskrit.

## Chapter 11 South Indian Kingdoms - I

### PALLAVAS

#### Learning Objectives

*Students will acquire knowledge about*

1. *Origin of the Pallavas.*
2. *Achievements of Mahendravarman I, Narasimhavarman I and Rajasimha.*
3. *Administration of the Pallavas.*
4. *Education and Literature under the Pallavas.*
5. *Art and architecture of the Pallavas.*

After the decline of the Sangam Age in the Tamil country, the Kalabhra rule lasted for about 250 years. Thereafter, the Pallavas established their kingdom in Tondaimandalam with its capital at Kanchipuram. Their rule continued till Tondaimandalam was captured and annexed by the Imperial Cholas in the beginning of the tenth century A.D.

#### Origin of the Pallavas

There are different views on the origin of the Pallavas. They were equated with the Parthians, the foreigners who ruled western India. Another view was that the Pallavas were a branch of the Brahmin royal dynasty of the Vakatakas of the Deccan. The third view relates the Pallavas with the descendants of the Chola prince and a Naga princess whose native was the island of Manipallavam. But these theories on the origin of the Pallavas were not supported by adequate evidences. Therefore, the view that the Pallavas were the natives of Tondaimandalam itself was widely accepted by scholars. They are also identical with the Pulindas mentioned in the inscriptions of Asoka. When Tondaimandalam was conquered by the Satavahanas, the Pallavas became their feudatories. After the fall of the Satavahanas in the third century A.D., they became independent. The Pallavas issued their earlier inscriptions in Prakrit and Sanskrit because of their Satavahana connections, and also patronised Brahmanism.

#### Political History

The early Pallava rulers from 250 A.D. to 350 A.D. issued their charters in Prakrit. Important among them were Sivaskandavarman and Vijayaskandavarman. The second line of Pallava rulers who ruled between 350 A.D. and 550 A.D. issued their charters in Sanskrit. The most important ruler of this line was Vishnugopa who was defeated by Samudragupta during his South Indian expedition. The rulers of the third line who ruled from 575 A.D. to their ultimate fall in the ninth century issued their charters both in Sanskrit and Tamil. Simhavishnu was the first ruler of this line. He destroyed the Kalabhras and firmly established the Pallava rule in Tondaimandalam. He also defeated the Cholas and extended the Pallava territory up to the river Kaveri.

Other great Pallava rulers of this line were Mahendravarman I, Narasimhavarman I, and Narasimhavarman II.

#### Mahendravarman I (600 - 630 A.D.)

The long-drawn Pallava - Chalukya Conflict began during his period. Pulakesin II marched against the Pallavas and captured the northern part of their kingdom. Although a Pallava inscription refers to the victory of Mahendravarman I at Pullalur, he was not able to recover the lost territory.

Mahendravarman I was a follower of Jainism in the early part of his career. He was converted to Saivism by the influence of the Saiva saint, Thirunavukkarasar alias Appar. He built a Siva temple at Tiruvadi. He assumed a number of titles like Gunabhara, Satyasandha, Chettakari (builder of temples) Chitrakarapuli, Vichitrachitta and Mattavilasa.

He was a great builder of cave temples. The Mandagappattu inscription hails him as Vichitrachitta who constructed a temple for Brahma, Vishnu and Siva without the use of bricks, timber, metal and mortar. His rock-cut temples are found in a number of places like Vallam, Mahendravadi, Dalavanur, Pallavaram, Mandagappattu and Tiruchirappalli. He had also authored the Sanskrit work Mattavilasa Prahasanam. His title Chitrakarapuli reveals his talents in painting. He is also regarded as an expert in music. The music inscription at Kudumianmalai is ascribed to him.

#### Narasimhavarman I (630-668 A.D.)

Narasimhavarman I was also known as Mamalla, which means 'great wrestler'. He wanted to take revenge the defeat of his father at the hands of Chalukyan ruler Pulakesin II. His victory over Pulakesin II in the Battle of Manimangalam near Kanchi is mentioned in Kuram copper plates. The Pallava army under General Paranjothi pursued the retreating Chalukya army, entered Chalukya territory, captured and destroyed the capital city of Vatapi. Narasimhavarman I assumed the title 'Vatapikonda'. He regained the lost territory. Another notable achievement of Narasimhavarman I was his naval expedition to Sri Lanka. He restored the throne to his friend and Sri Lankan prince Manavarma. During his reign, Hiuen Tsang visited the Pallava capital Kanchipuram. His description of Kanchi is vivid. He calls it a big and beautiful city, six miles in circumference. It had 100 Buddhist monasteries in which about 10,000 Buddhist monks lived. According to his account the people of Kanchi esteemed great learning and the Ghatika at Kanchi served as a great centre of learning. Narasimhavarman I was the founder of Mamallapuram and the monolithic rathas were erected during his reign.

#### Narasimhavarman II or Rajasimha (695 - 722 A.D.)

Narasimhavarman I was succeeded by Mahendravarman II and Parameswarvarman I and the Pallava - Chalukya conflict continued during their reign. Thereafter, Narasimhavarman II became the ruler of the Pallava kingdom. He was also known as Rajasimha. His regime was peaceful and he evinced more interest in developing the art and architecture. The Shore temple at Mamallapuram and the Kailasanatha temple at Kanchipuram were built in this period. He was also a great patron of art and letters. The famous Sanskrit scholar Dandin is said to have adorned his court. He sent embassies to China and the maritime trade flourished during his reign. Rajasimha assumed titles like Sankarabhakta, Vadhyaividhyadhara and Agamapriya.

He was succeeded by Parameswaravarman II and Nandivarman II. The Pallava rule lasted till the end of the ninth century A.D. The Chola king Aditya I defeated the last Pallava ruler Aparajita and seized the Kanchi region. With this, the rule of Pallava dynasty came to an end.

### Administration of the Pallavas

The Pallavas had a well organized administrative system. The Pallava state was divided into *Kottams*. The *Kottam* was administered by officers appointed by the king. The king was at the centre of administration in which he was assisted by able ministers. He was the fountain of justice. He maintained a well-trained army. He provided land-grants to the temples known as *Devadhana* and also to the Brahmans known as *Brahmadeya*. It was also the responsibility of the central government to provide irrigation facilities to the lands. A number of irrigation tanks were dug by the Pallava kings. The irrigation tanks at Mahendravadi and Mamandoor were dug during the reign of Mahendravarman I. Detailed information on the tax system could also be traced from the Pallava inscriptions. Land tax was the primary source of the government revenue. The *Brahmadeya* and *Devadhana* lands were exempted from tax. Traders and artisans such as carpenters, goldsmiths, washer-men, oil-pressers and weavers paid taxes to the government. The Pallava inscriptions throw much light on the village assemblies called *sabhas* and their committees. They maintained records of all village lands, looked after local affairs and managed temples.

### Society under the Pallavas

The Tamil society witnessed a great change during the Pallava period. The caste system became rigid. The Brahmins occupied a high place in the society. They were given land-grants by the kings and nobles. They were also given the responsibility of looking after the temples. The Pallava period also witnessed the rise of Saivism and Vaishnavism and also the decline of Buddhism and Jainism. The Saiva Nayanmars and the Vaishnava Alvars contributed to the growth of Saivism and Vaishnavism. This is known as the Bakthi Movement. They composed their hymns in the Tamil language. These hymns revealed the importance of devotion or Bakthi. The construction of temples by the Pallava kings paved the way for the spread of these two religions.

### Education and Literature

The Pallavas were great patrons of learning. Their capital Kanchi was an ancient centre of learning. The *Ghatika* at Kanchi was popular and it attracted students from all parts of India and abroad. The founder of the Kadamba dynasty, Mayurasarman studied Vedas at Kanchi. Dingana, a Buddhist writer came to study at Kanchi. Dharmapala, who later became the Head of the Nalanada University, belonged to Kanchi. Bharavi, the great Sanskrit scholar lived in the time of Simhavishnu. Dandin, another Sanskrit writer adorned the court of Narasimhavarman II. Mahendravarman I composed the Sanskrit play *Mattavilasaprahasanam*. Tamil literature had also developed. The Nayanmars and Alvars composed religious hymns in Tamil. The *Devaram* composed by Nayanmars and the *Nalayradivya Prabandam* composed by Alvars represent the religious literature of the Pallava period. Perundevanar was patronized by Nandivarman II and he translated the Mahabharata as *Bharathavenba* in Tamil. *Nandikkalambagam* was another important

work but the name of the author of this work is not known. Music and dance also developed during this period.

### Pallava Art and Architecture

It was a great age of temple building. The Pallavas introduced the art of excavating temples from the rock. In fact, the Dravidian style of temple architecture began with the Pallava rule. It was a gradual evolution starting from the cave temples to monolithic *rathas* and culminated in structural temples. The development of temple architecture under the Pallavas can be seen in four stages.

Mahendravarman I introduced the rock-cut temples. This style of Pallava temples are seen at places like Mandagappattu, Mahendravadi, Mamandur, Dalavanur, Tiruchirappalli, Vallam, Siyamangalam and Tirukalukunram.

The second stage of Pallava architecture is represented by the monolithic *rathas* and Mandapas found at Mamallapuram. Narasimhavarman I took the credit for these wonderful architectural monuments. The five *rathas*, popularly called as the *Panchapanadava rathas*, signifies five different styles of temple architecture. The mandapas contain beautiful sculptures on its walls. The most popular of these mandapas are Mahishasuramardhini Mandapa, Tirumurthi Mandapam and Varaha Madapam.

In the next stage, Rajasimha introduced the structural temples. These temples were built by using the soft sand rocks. The

Kailasanatha temple at Kanchi and the Shore temple at Mamallapuram remain the finest examples of the early structural temples of the Pallavas. The Kailasanatha temple at Kanchi is the greatest architectural master piece of the Pallava art.

The last stage of the Pallava art is also represented by structural temples built by the later Pallavas. The Vaikundaperumal temple, Muktheeswara temple and Matagenswara temples at Kanchipuram belong to this stage of architecture.

Shore Temple at Mamallapuram

The Pallavas had also contributed to the development of sculpture. Apart from the sculptures found in the temples, the 'Open Art Gallery' at Mamallapuram remains an important monument bearing the sculptural beauty of this period. The Descent of the Ganges or the Penance of Arjuna is called a fresco painting in stone. The minute details as well as the theme of these sculptures such as the figures of lice-picking monkey, elephants of huge size and the figure of the 'ascetic cat' standing erect remain the proof for the talent of the sculptor.

The Fall of Ganges

### Fine Arts

Music, dance and painting had also developed under the patronage of the Pallavas. The Mamandur inscription contains a note on the notation of vocal music. The Kudumianmalai inscription referred to musical notes and instruments. The Alvars and Nayanmars composed their hymns in various musical notes. Dance and drama also developed during this period. The sculptures of this period depict many dancing postures. The Sittannavasal paintings belonged to this period. The commentary called Dakshinchitra was compiled during the reign of Mahendravarman I, who had the title Chittirakkrapuli.



## Chapter 12

### South Indian Kingdoms - II

#### CHALUKYAS AND RASHTRAKUTAS

##### Learning Objectives

Students will acquire knowledge about

1. The achievements of Chalukya ruler Pulakesin II.
2. Administration, social life and art and architecture under the Chalukyas.
3. Political history of the Rashtrakutas.
4. Administration and society under the Rashtrakutas.
5. Art and architecture of the Rashtrakutas.

Besides the Pallavas, the Western Chalukyas and the Rashtrakutas in the Deccan constitute important political forces. Both these kingdoms had their rivals in the far south, namely the Pallavas and later the Cholas. Their period has also been important in the history of India for their cultural contributions.

##### Chalukyas (543 - 755 A.D.)

The Western Chalukyas ruled over an extensive area in the Deccan for about two centuries after which the Rashtrakutas became powerful. The family of Western Chalukyas had its offshoots like the Eastern Chalukyas of Vengi and the Chalukyas of Kalyani. Pulakesin I was the founder of the Chalukya dynasty. He established a small kingdom with Vatapi or Badami as its capital.

##### Pulakesin II (608-642 A.D.)

The most important ruler of this dynasty was Pulakesin II. The Aihole inscription issued by him gives the details of his reign.

He fought with the Kadambas of Banavasi and the Gangas of Mysore and established his suzerainty. Durvinita, the Ganga ruler accepted his overlordship and even gave his daughter in marriage to Pulakesin II. Another notable achievement of Pulakesin II was the defeat of Harshavardhana on the banks of the river Narmada. He put a check to the ambition of Harsha to conquer the south. In his first expedition against the Pallavas, Pulakesin II emerged victorious. But he suffered a humiliating defeat at the hands of Narasimhavarman I near Kanchi. Subsequently, the Chalukya capital Vatapi was captured and destroyed by the Pallavas. The most important event in the reign of Pulakesin II was the visit of Hiuen Tsang to his kingdom. The successor of Pulakesin II was Vikramaditya. He once again consolidated the Chalukya kingdom and plundered the Pallava capital, Kanchi. Thus he had avenged his father's defeat and death at the hands of the Pallavas. Kirtivarman II was the last of the rulers of the Chalukyas. He was defeated by Dantidurga, the founder of the Rashtrakuta dynasty.

##### Administration and Social Life under the Chalukyas

The Chalukya administration was highly centralized unlike that of the Pallavas and the Cholas. Village autonomy was absent under the Chalukyas. The Chalukyas had a great maritime power. Pulakesin II had 100 ships in his navy. They also had a small standing army.

The Badami Chalukyas were Brahmanical Hindus but they gave respect to other religions. Importance was given to Vedic rites and rituals. The founder of the dynasty Pulakesin I performed the *asvamedha* sacrifice. A number of temples in honour of Vishnu, Siva and other gods were also built during this period. Hiuen Tsang mentioned about the decline of Buddhism in western Deccan. But Jainism was steadily on the path of

progress in this region. Ravikirti, the court poet of Pulakesin II who composed the Aihole inscription was a Jain.

The Chalukyas were great patrons of art. They developed the *vesara* style in the building of structural temples.

However, the *vesara* style reached its culmination only under the Rashtrakutas and the Hoysalas. The structural temples of the Chalukyas exist at Aihole, Badami and Pattadakal. Cave temple architecture was also famous under the Chalukyas. Their cave temples are found in Ajanta, Ellora and Nasik. The best specimens of Chalukya paintings can be seen in the Badami cave temple and in the Ajanta caves. The reception given to a Persian embassy by Pulakesin II is depicted in a painting at Ajanta.

The Chalukya temples may be divided into two stages. The first stage is represented by the temples at Aihole and Badami. Among the seventy temples found at Aihole, four are important.

1. Ladh Khan temple is a low, flat-roofed structure consisting of a pillared hall.

2. Durga temple resembles a Buddha *Chaitya*.

3. Huchimalligudi temple.

4. The Jain temple at Meguti.

Among the temples at Badami, the Muktheeswara temple and the Melagutti Sivalaya are notable for their architectural beauty. A group of four rock-cut temples at Badami are marked by high workmanship. The walls and pillared halls are adorned by beautiful images of gods and human beings.

The second stage is represented by the temples at Pattadakal. There are ten temples here, four in the northern style and the remaining six in the Dravidian style. The Papanatha temple is the most notable in the northern style. The Sangamesvara temple and the Virupaksha temple are famous for their Dravidian style. The Virupaksha temple is built on the model of the Kailasanatha temple at Kanchipuram. It was built by one of the queens of Vikramaditya II. Sculptors brought from Kanchi were employed in its construction.

##### Rashtrakutas (755 - 975 A.D.)

The Rashtrakutas were of Kannada origin and Kannada language was their mother tongue. Dantidurga was the founder of the Rashtrakuta dynasty. He defeated the Gurjaras and captured Malwa from them. Then he annexed the Chalukya kingdom by defeating Kirtivarman II. Thus, the Rashtrakutas became a paramount power in the Deccan. His successor Krishna I was also a great conqueror. He defeated the Gangas and the eastern Chalukyas of Vengi. He built the magnificent rock-cut monolithic Kailasa temple at Ellora. The next important king of this dynasty was Govinda III. He achieved victories over north Indian kingdoms.

His successor Amoghavarsha I (815- 880 A.D.) ruled for a long period of 64 years. He had lost control over Malwa and Gangavadi. Yet, his reign was popular for the cultural development. He was a follower of Jainism. Jinasena was his chief preceptor. He was also a patron of letters and he himself wrote the famous Kannada work, *Kavirajamarga*. He had also built the Rashtrakuta capital, the city of Malkhed or Manyakheda.

Among the successors of Amoghavarsha I, Krishna III (936-968 A.D.) was famous for his expeditions. He marched against the Cholas and defeated them at Takkolam. He marched further south and captured Tanjore. He went as far as Rameswaram and occupied it for sometime. He built several temples in the conquered

territories including the Krishneswara temple at Rameswaram. Throughout his reign he possessed the Tondaimandalam region including the capital Kanchi. After his death, the power of the Rashtrakutas declined.

### Administration

The Rashtrakuta Empire was divided into several provinces called *rashtras* under the control of *rashtrapatis*. They were further divided into *vishayas* or districts governed by *vishayapatis*. The next subdivision was *bhukti* consisting of 50 to 70 villages under the control of *bhogapatis*. These officers were directly appointed by the central government. The village administration was carried on by the village headmen. However, the village assemblies played a significant role in the village administration.

### Society and Economy

The Hindu sects of Vaishnavism and Saivism flourished during the period of Rashtrakutas. Yet, they did not affect the progress of Jainism under the patronage of Rashtrakuta kings and officers. Almost one third of the population of the Deccan were Jains. There were some prosperous Buddhist settlements at places like Kanheri, Sholapur and Dharwar. There was harmony among various religions. There was a college at Salatogi, situated in modern Bijapur district. An inscription gives details of this educational centre. It was run by the income from the endowments made by the rich as well as by all the villagers on occasions of functions and festivals.

The economy was also in a flourishing condition. There was an active commerce between the Deccan and the Arabs. The Rashtrakuta kings promoted the Arab trade by maintaining friendship with them.

### Cultural Contributions

The Rashtrakutas widely patronized the Sanskrit literature. There were many scholars in the Rashtrakuta court. Trivikrama wrote *Nalachampu* and the *Kavirahasya* was composed by Halayudha during the reign of Krishna III. The Jain literature flourished under the patronage of the Rashtrakutas. Amogavarsha I, who was a Jain patronized many Jain scholars. His teacher Jinasena composed *Parsvabhudaya*, a biography of Parsva in verses. Another scholar Gunabhadra wrote the *Adipurana*, the life stories of various Jain saints. Sakatayana wrote the grammar work called *Amogavritti*. The great mathematician of this period, Viracharya was the author of *Ganitasaram*. The Kannada literature saw its beginning during the period of the Rashtrakutas. Amogavarsha's *Kavirajamarga* was the first poetic work in Kannada language. Pampa was the greatest of the Kannada poets. His famous work was *Vikramasenavijaya*. Ponna was another famous Kannada poet and he wrote *Santipurana*.

### Art and Architecture

The art and architecture of the Rashtrakutas were found at Ellora and Elephanta. At Ellora, the most remarkable temple is the Kailasa temple. It was excavated during the reign of Krishna I. It is carved out of a massive block of rock 200 feet long, and 100 feet in breadth and height. The temple consists of four parts - the main shrine, the entrance gateway, an intermediate shrine for Nandi and mandapa surrounding the courtyard. The temple stands on a lofty plinth 25 feet high. The central face of the plinth has imposing figures of elephants and lions giving the impression that the entire structure rests on their back. It has a three-tiered *sikhara* or tower resembling

the *sikhara* of the Mamallapuram *rathas*. In the interior of the temple there is a pillared hall which has sixteen square pillars. The Kailasa temple is an architectural marvel with its beautiful sculptures. The sculpture of the Goddess Durga is shown as slaying the Buffalo demon. In another sculpture Ravana was making attempts to lift Mount Kailasa, the abode of Siva. The scenes of Ramayana were also depicted on the walls. The general characteristics of the Kailasa temple are more Dravidian.

## Chapter 13 Imperial Cholas

### Learning Objectives

Students will acquire knowledge about

1. A brief history of early Cholas.
2. Military conquests and other achievements of Rajaraja I.
3. Campaigns of Rajendra I and his accomplishments.
4. Salient features of the Chola administration.
5. Literature, Art and architecture of the Cholas.

After the decline of the Sangam period, the Cholas became feudatories in Uraiyur. They became prominent in the ninth century and established an empire comprising the major portion of South India. Their capital was Tanjore. They also extended their sway in Sri Lanka and the Malay Peninsula. Therefore, they are called as the Imperial Cholas. Thousands of inscriptions found in the temples provide detailed information regarding the administration, society, economy and culture of the Chola period.

The founder of the Imperial Chola line was Vijayalaya. He captured Tanjore from Muttaraiyars in 815 A.D. and built a temple for Durga. His son Aditya put an end to the Pallava kingdom by defeating Aparajita and annexed Tondaimandalam. Parantaka I was one of the important early Chola rulers. He defeated the Pandyas and the ruler of Ceylon. But he suffered a defeat at the hands of the Rashtrakutas in the famous battle of Takkolam. Parantaka I was a great builder of temples. He also provided the *vimana* of the famous Nataraja temple at Chidambaram with a golden roof. The two famous Uttiramerur inscriptions that give a detailed account of the village administration under the Cholas belong to his reign. After a gap of thirty years, the Cholas regained their supremacy under Rajaraja I.

### Rajaraja I (985 - 1014 A.D.)

It was under Rajaraja I and his son Rajendra I that the Chola power reached its highest point of glory. His military conquests were:

1. The defeat of the Chera ruler Bhaskaravarman in the naval battle of Kandalursalai and the destruction of the Chera navy.
2. The defeat of the Pandya ruler, Amarabhujanga and establishment of Chola authority in the Pandya country.
3. The conquest of Gangavadi, Tadigaipadi and Nolambapadi located in the Mysore region.
4. The invasion of Sri Lanka which was entrusted to his son Rajendra I. As the Sri Lankan king Mahinda V fled away from his country, the Cholas annexed the northern Sri Lanka. The capital was shifted from Anuradhapura to Polanaruva where a Shiva temple was built.
5. The Chola victory over the growing power of the Western Chalukyas of Kalyani. Satyasraya was defeated and Rajaraja I captured the Raichur Doab, Banavasi and other places. Hence the Chola power extended up to the river Tungabhadra.

6. The restoration of Vengi throne to its rulers Saktivarman and Vimaladitya by defeating the Telugu Chodas. Rajaraja gave his daughter Kundavai in marriage to Vimaladitya.

7. Rajaraja's last military achievement was a naval expedition against the Maldives which were conquered.

By these conquests, the extent of the Chola empire under Rajaraja I included the Pandya, Chera and the Tondaimandalam regions of Tamil Nadu and the Gangavadi, Nolambapadi and the Telugu Choda territories in the Deccan and the northern part of Ceylon and the Maldives beyond India. Rajaraja assumed a number of titles like Mummidi Chola, Jayankonda and Sivapadasekara. He was a devout follower of Saivism. He completed the construction of the famous Rajarajeswara temple or Brihadeeswara temple at Tanjore in 1010 A.D. He also helped in the construction of a Buddhist monastery at Nagapattinam.

### **Rajendra I (1012-1044 A.D.)**

Rajendra had demonstrated his military ability by participating in his father's campaigns. He continued his father's policy of aggressive conquests and expansion. His important wars were:

1. Mahinda V, the king of Sri Lanka attempted to recover from the Cholas the northern part of Ceylon. Rajendra defeated him and seized the southern Sri Lanka. Thus the whole of Sri Lanka was made part of the Chola Empire.

2. He reasserted the Chola authority over the Chera and Pandya countries.

3. He defeated Jayasimha II, the Western Chalukya king and the river Tungabhadra was recognised as the boundary between the Cholas and Chalukyas.

4. His most famous military enterprise was his expedition to north India. The Chola army crossed the Ganges by defeating a number of rulers on its way. Rajendra defeated Mahipala I of Bengal. To commemorate this successful north-Indian campaign Rajendra founded the city of Gangaikondacholapuram and constructed the famous Rajeswaram temple in that city. He also excavated a large irrigation tank called Chola Gangam on the western side of the city.

5. Another famous venture of Rajendra was his naval expedition to Kadaram or Sri Vijaya. It is difficult to pin point the real object of the expedition. Whatever its objects were, the naval expedition was a complete success. A number of places were occupied by Chola forces. But it was only temporary and no permanent annexation of these places was contemplated. He assumed the title Kadaramkondan.

6. Rajendra I had put down all rebellions and kept his empire in tact.

At the death of Rajendra I the extent of the Chola Empire was at its peak. The river Tungabhadra was the northern boundary. The Pandya, Kerala and Mysore regions and also Sri Lanka formed part of the empire. He gave his daughter Ammangadevi to the Vengi Chalukya prince and further continued the matrimonial alliance initiated by his father. Rajendra I assumed a number of titles, the most famous being Mudikondan, Gangaikondan, Kadaram Kondan and Pandita Cholan. Like his father he was also a devout Saiva and built a temple for that god at the new capital Gangaikondacholapuram. He made liberal endowments to this temple and to the Lord Nataraja temple at Chidambaram. He was also tolerant towards the Vaishnava and Buddhist sects.

After Rajendra I, the greatness of the Chola power was preserved by rulers like Kulottunga I and Kulottunga III. Kulottunga I was the grandson of Rajendra I through his daughter Ammangadevi. He succeeded the Chola throne and thus united the Vengi kingdom with the Chola Empire. During his reign Sri Lanka became independent.

Subsequently, Vengi and the Mysore region were captured by the western Chalukyas. Kulottunga I sent a large embassy of 72 merchants to China and maintained cordial relations with the kingdom of Sri Vijaya. Under Kulottunga III the central authority became weak. The rise of the feudatories like the Kadavarayas and the emergence of the Pandya power as a challenge to Chola supremacy contributed to the ultimate downfall of the Chola Empire. Rajendra III was the last Chola king who was defeated by Jatavarman Sundarapandya II. The Chola country was absorbed into the Pandya Empire.

### **Chola Administration**

#### **Central Government**

The Cholas had an excellent system of administration. The emperor or king was at the top of the administration. The extent and resources of the Chola Empire increased the power and prestige of monarchy. The big capital cities like Tanjore and Gangaikondacholapuram, the large royal courts and extensive grants to the temples reveal the authority of the king. They undertook royal tours to increase the efficiency of the administration. There was elaborate administrative machinery comprising various officials called *perundanam* and *sirudanam*.

#### **Revenue**

The land revenue department was well organized. It was called *aspuravavarithinaikkalam*. All lands were carefully surveyed and classified for assessment of revenue. The residential portion of the village was called *ur nattam*. These and other lands such as the lands belonging to temples were exempted from tax. Besides land revenue, there were tolls and customs on goods taken from one place to another, various kinds of professional taxes, dues levied on ceremonial occasions like marriages and judicial fines. During the hard times, there were remission of taxes and Kulottunga I became famous by abolishing tolls and earned the title - *Sungam Tavirtta Cholan*. The main items of government expenditure were the king and his court, army and navy, roads, irrigation tanks and canals.

#### **Military Administration**

The Cholas maintained a regular standing army consisting of elephants, cavalry, infantry and navy. About seventy regiments were mentioned in the inscriptions. The royal troops were called *Kaikkolaperumpadai*. Within this there was a personal troop to defend the king known as *Velaikkarrar*. Attention was given to the training of the army and military cantonments called *kadagams* existed. The Cholas paid special attention to their navy. The naval achievements of the Tamils reached its climax under the Cholas. They controlled the Malabar and Coromandel coasts. In fact, the Bay of Bengal became a Chola lake for sometime.

#### **Provincial Administration**

The Chola Empire was divided into *mandalams* and each *mandalam* into *valanadus* and *nadus*. In each *nadu* there were a number of autonomous villages. The royal princes or officers were in charge of *mandalams*. The *valanadu* was under *periyannattar* and *nadu* under



*nattar*. The town was known as *nagaram* and it was under the administration of a council called *nagarattar*.

### Village Assemblies

The system of village autonomy with *sabhas* and their committees developed through the ages and reached its culmination during the Chola rule. Two inscriptions belonging to the period of Parantaka I found at Uttiramerur provide details of the formation and functions of village councils. That village was divided into thirty wards and each was to nominate its members to the village council. The qualifications to become a ward member were:

- Ownership of at least one fourth *veli* of land.
- Own residence.
- Above thirty years and below seventy years of age.
- Knowledge of Vedas.

However, certain norms of disqualification were also mentioned in the inscriptions. They were:

- Those who had been members of the committees for the past three years.
- Those who had failed to submit accounts as committee members.
- Those who had committed sins.
- Those who had stolen the property of others.

From the persons duly nominated, one was to be chosen for each ward by *kudavolai* system for a year. The names of eligible persons were written on palm-leaves and put into a pot. A young boy or girl would take out thirty names each for one ward. They were divided into six *variya*s such as *samvatsaravariyam*, *erivariyam*, *thotta variyam*, *pancha variyam*, *pon variyam* and *puruvuvu variyam* to take up six different functions of the village administration. The committee members were called *variyaapperumakkal*. They usually met in the temple or under a tree and passed resolutions. The number of committees and ward members varied from village to village.

### Socio-economic Life

Caste system was widely prevalent during the Chola period.

Brahmins and Kshatriyas enjoyed special privileges. The inscriptions of the later period of the Chola rule mention about two major divisions among the castes - *Valangai* and *Idangai* castes. However, there was cooperation among various castes and sub-castes in social and religious life. The position of women did not improve. The practice of 'sati' was prevalent among the royal families. The *devadasi* system or dancing girls attached to temples emerged during this period.

Both Saivism and Vaishnavism continued to flourish during the Chola period. A number of temples were built with the patronage of Chola kings and queens. The temples remained centres of economic activity during this period. The *mathas* had great influence during this period. Both agriculture and industry flourished.

Reclamation of forest lands and the construction and maintenance of irrigation tanks led to agricultural prosperity. The weaving industry, particularly the silk-weaving at Kanchi flourished. The metal works developed owing to great demand of images for temples and utensils. Commerce and trade were brisk with trunk roads or *peruvazhis* and merchant guilds.

Gold, silver and copper coins were issued in plenty at various denominations. Commercial contacts between the Chola Empire and China, Sumatra, Java and Arabia were extensively prevalent. Arabian horses were imported in large numbers to strengthen the cavalry.

### Education and Literature

Education was also given importance. Besides the temples and *mathas* as educational centres, several educational institutions also flourished. The inscription at Ennayiram, Thirumukkudal and Thirubhuvanai provide details of the colleges existed in these places. Apart from the Vedas and Epics, subjects like mathematics and medicine were taught in these institutions. Endowment of lands was made to run these institutions.

The development of Tamil literature reached its peak during the Chola period. *Sivakasintamani* written by Thiruthakkadevar and Kundalakesi belonged to 10<sup>th</sup> century. The Ramayana composed by Kambar and the *Periyapurana* or *Tiruttondarapurana* by Sekkilar are the two master-pieces of this age. Jayankondar's *Kalingattupparani* describes the Kalinga war fought by Kulotunga I. The *Moovarula* written by Ottakuthar depicts the life of three Chola kings. The *Nalavenba* was written by Pugalendi. The works on Tamil grammar like *Kalladam* by Kalladanar, *Yapperungalam* by Amirthasagarar, a Jain, *Nannul* by Pavanandhi and *Virasoliyam* by Buddhimitra were the products of the Chola age.

### Art and Architecture

The Dravidian style of art and architecture reached its perfection under the Cholas. They built enormous temples. The chief feature of the Chola temple is the vimana. The early Chola temples were found at Narthamalai and Kodumbalur in Pudukottai district and at Srinivasanallur in Tiruchirappalli district. The Big Temple at Tanjore built by Rajaraja I is a master-piece of South Indian art and architecture. It consists of the *vimana*, *ardhamandapa*, *mahamandapa* and a large pavilion in the front known as the *Nandimandapa*.

Another notable contribution made by the Cholas to temple architecture is the Siva temple at Gangaikondacholapuram built by Rajendra I. The Airavathesvara temple at Darasuram in Tanjore District and the Kampaharesvara temple at **Darasuram** **Sculptures** Tribhuvanam are examples of later Chola temples

The Cholas also made rich contributions to the art of sculpture. The walls of the Chola temples such as the Tanjore and Gangaikondacholapuram temples contain numerous icons of large size with fine execution. The bronzes of the Chola period are world-famous. The bronze statues of Nataraja or dancing Siva are master pieces.

The Chola paintings were found on the walls

**ChdapuramTempte**

## Chapter 14 The Spread Of Indian Culture In Other Asian Countries

### Learning Objectives

Students will acquire knowledge about

1. The spread of Indian culture in central Asia.
2. Indian cultural influence in China, Tibet and Sri Lanka.
3. Indian cultural influence over the South East Asia.
4. Cultural contacts between India and Myanmar.
5. Art and architecture in the countries of South East Asia.

The spread of Indian culture and civilization to the other parts of Asia constitutes an important chapter in the history of India. India had established commercial contacts with other countries from the earliest times. It

had inevitably resulted in the spread of Indian languages, religions, art and architecture, philosophy, beliefs, customs and manners. Indian political adventurers even established Hindu kingdoms in some parts of South East Asia. However, this did not lead to any kind of colonialism or imperialism in the modern sense. On the other hand these colonies in the new lands were free from the control of the mother country. But they were brought under her cultural influence.

### Central Asia

Central Asia was a great centre of Indian culture in the early centuries of the Christian era. Several monuments have been unearthed in the eastern part of Afghanistan. Khotan and Kashgar remained the most important centres of Indian culture. Several Sanskrit texts and Buddhist monasteries were found in these places. Indian cultural influence continued in this region till eighth century. Indian culture had also spread to Tibet and China through Central Asia.

### India and China

China was influenced both by land route passing through Central Asia and the sea route through Burma. Buddhism reached China in the beginning of the first century A.D. A number of Chinese pilgrims like Fahien and Hiuen Tsang visited India. On the other side, hundreds of Buddhist monks like Gunabhadra, Vajrabodhi, Dharmadeva and Dharmagupta visited China. Indian scholars translated many Sanskrit works at the request of Chinese emperors. This contact with China continued even in the thirteenth century when the Mongols established their empire in China. Chinese art had also been influenced by Indian art.

### India and Tibet

Tibet was influenced by India from the seventh century. The famous Buddhist king Gampo founded the city of Lhasa and introduced Buddhism. The Tibetan alphabet was devised with the help of Indian scholars. Later, the Indian scholars helped for the establishment of Lamaism in Tibet. In the eleventh century the Pala dynasty of Bengal had close contacts with Tibet. When Bengal was attacked by the Muslim rulers, many Buddhist monks sought shelter in Tibet.

### India and Sri Lanka

Despite having different political history, Sri Lanka experienced a great cultural influence from India. Buddhist missionaries had spread not only the religious faith but also cultural traditions. The art of stone carving went to Sri Lanka from India. In the fifth century, Buddha Ghosha visited Sri Lanka and consolidated there the Hinayana Buddhism. The famous paintings of Sigiriya were modeled on the Ajantha paintings.

### Indian Culture in South East Asia

Indian culture had extended its mighty influence in the South East Asian region consisting of the Malay Archipelago and IndoChina. They are located across the Bay of Bengal. Being fertile and rich in minerals, these lands attracted the attention of the Indians. Moreover, the east coast of India is studded with numerous ports and Indians undertook frequent voyages to these lands. The ancient traditions refer to traders' voyages to *Suvarnabhumi*, (the land of gold) a name generally given to all the countries of the East Asia. Indians began to colonize the East Asia in the Gupta period. It was further encouraged by the Pallavas. The Indian colonists established great kingdoms and some of them lasted for more than a thousand years. A number of dynasties with

Indian names ruled in various parts. Till the arrival of Islam in the fifteenth century, Indian culture dominated this region.

### Cambodia (Kambhoja)

Cambodia was colonised by Indians in the first century A.D. They influenced the native people called the Khmers. The ruling dynasty was known as Kambojas and their country was Kamboja or modern Cambodia. Under the early rulers Saivism and Vaishnavism made steady progress. The Kamboja empire at its greatest extent included Laos, Siam, part of Burma and the Malay peninsula. Numerous Sanskrit inscriptions give us a detailed history of its kings. A number of Hindu literary works like the Vedas, the *Ramayana*, the *Mahabharata*, Panini's grammar, Hindu philosophical treatises were all known to the people of Cambodia. Like the Pallava kings, they were called Varmans. Yasovarman and Suryavarman II were two well-known rulers. Temples were built in South Indian style. There are plenty of Sanskrit inscriptions. The most famous of these temples was the temple (wat) of Vishnu built by Suryavarman II in his capital city Angkor. It was popularly called as the Angkorwat Temple. It is standing on top of a terraced structure. Each terrace is a sort of a covered gallery which contains numerous relief sculptures. The temple is constructed on the Dravidian style and the sculptures depict episodes from the *Ramayana* and the *Mahabharata*. The Kambhoja kingdom declined only in fifteenth century.

### Champa

Champa or South Annam is situated to the east of Cambodia. The first Hindu dynasty was established by Sri Mara in the second century A.D. A number of Sanskrit inscriptions throw light on the history of Champa. Twelve Indian dynasties ruled over Champa and by the thirteenth century Champa was annexed to Cambodia. Under its Hindu rulers the Hindu religion and culture, customs and manners were introduced in Champa. Saivism and Vaishnavism flourished. Buddhism also existed side by side. Various works on Hindu philosophy, grammar, fine arts and astrology were written.

### Siam or Thailand

There were several states in Siam following Indian culture. Thai script was developed with the help of Indian scholars. The traditional laws of that country were composed on the model of *Dharmasastras*. The temples at Bangkok contain many sculptures depicting the *Ramayana*.

### Sumatra and Java

The Malay Archipelago had remained an important link between India and the Far East. Several Hindu kingdoms existed here between fifth to fifteenth centuries A.D. The most important Hindu kingdom in the big island of Sumatra was Sri Vijaya. It was a great centre of trade and culture in the seventh century. Subsequently, the Sri Vijaya kingdom developed into a powerful maritime and commercial power known as the Sailendra empire extending its sway over the neighbouring islands of Java, Bali, Borneo and over Cambodia. The Sailendra rulers were Mahayana Buddhists and maintained cordial relations with the Indian kingdoms of the Palas of Bengal and the Cholas of Tamil Nadu. Rajaraja Chola allowed the Sailendra king Maravijayottungavarman to build a Buddhist monastery at Nagapattinam. His son Rajendra conquered the Sailendra kingdom for sometime. Later

they became independent. The Sailendra empire continued intact till the eleventh century A.D. A Hindu kingdom was established in Java as early as the fourth century A.D. In Central Java arose the kingdom of Mataram which became a strong centre of Hindu religion and culture. It was conquered by the Sailendras of Sumatra. Till the ninth century Java continued to be a part of the Sailendra empire. Later it regained its independence. Java attained greatness and splendour in art under Sailendra rule.

The greatest monument of Indo- Java art is the *Borobudur* which was built during A.D. 750-850 under the patronage of the Sailendras. It is situated on the top of a hill. It consists of nine successive terraces, crowned by a bell-shaped stupa at the centre of the topmost terrace. The open galleries in the terraces contain 2000 bas-reliefs (small carved stone figures) illustrating various incidents in the life of the Buddha. The lower parts are rich in decoration while the upper portions are plain and unadorned. Borobudur is described as an epic in stone, the most wonderful Buddhist stupa in the world.

In the twelfth century, eastern Java with *Kadiri* as its capital developed into the leading kingdom of Java. In the thirteenth and fourteenth centuries which marked the golden age of Javanese culture, Majapahit became the capital of the far-flung Javanese empire which

included the neighbouring islands. Indian art and literature flourished in Java to an extent unknown elsewhere. Still, ruins of hundreds of temples and manuscripts based on the Sanskrit language are found in Java. The *Ramayana* and the *Mahabharata* were popular and even today furnish the theme for their popular shadow-play. The fall of Majapahit brought to an end all artistic activity in Java.

### **Bali**

Bali came under the rule of Hindu dynasties as early as the sixth century. I-Tsing refers to the prevalence of Buddhism there in the seventh century. The stone and copper plate inscriptions from that island show that it was colonised directly from India. Later it became subordinate to Java. Its people continue to be Hindus and even today we find the prevalence of the caste system there.

### **Myanmar**

The cultural contacts between India and Burma (now Myanmar) dates back to the period of Asoka, who sent his missionaries there to preach Buddhism. Many Hindu kingdoms existed in Burma. Pali and Sanskrit were the languages of Burma till thirteenth century. Both Hinayana and Mahayana Buddhism were followed by the Burmese.



# NCERT Class 12

## Medieval India (Old NCERT)

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 Early Medieval India

##### Learning Objectives

*Students will acquire knowledge about*

1. A brief history of the Rajput kingdoms.
2. Causes and results of the Arab conquest of Sind.
3. Mahmud of Ghazni and his invasions.
4. Mahmud of Ghori's invasions.
5. Causes for the failure of Hindu states.

After the death of Harsha, there was no political unity in north India for about five centuries. The country was split up into a number of states which were constantly fighting and changing their frontiers. The important kingdoms in north India were Kashmir, Gandhara, Sind, Gujarat, Kanauj, Ajmir, Malwa, Bengal and Assam. In the early eighth century Kashmir was dominant. Then, the Palas of Bengal reigned supreme till the Pratiharas became the most powerful rulers of north India. But in the tenth century, the Rashtrakutas of Deccan tried to extend their power in north India but ultimately failed in their attempt.

##### Rajput Kingdoms

The dominance of Rajputs began from the seventh and eighth centuries and lasted till the Muslim conquest in the twelfth century. Even after that, many Rajput states continued to survive for a long time. In the period of Muslim aggression, the Rajputs were the main defenders of the Hindu religion and culture.

There are several theories about the origin of Rajputs. They were considered as the descendents of the foreign invaders and the Indian Kshatriyas. The foreign invaders were Indianized and absorbed into Indian society. Many legends of Rajputs support this theory. Therefore, it can be said that diverse elements constitute in the shaping of the Rajput clan. They became homogenous by constant intermarriage and by adopting common customs. They made war as their chief occupation. However, trade and agriculture also prospered. The Arab travellers refer to the prosperity of the land and the great trade of the cities. They built strong forts.

The Gurjara-Pratiharas were the earliest of the Rajput rulers. Its first great leader was Harischandra. He conquered extensive territory in Rajaputana and ruled with his capital at Bhinmal. The Gurjaras were in different branches. One branch ruled Gujarat and another at Avanthi. The Pratiharas involved themselves in a three- cornered contest with the Palas of Bengal and the Rashtrakutas of Deccan. Later the Pratiharas became weak. The Chauhans, the most valiant of the Rajput races, ruled Ajmir. Vigraharaj was their most important king, who occupied Delhi. Therefore the Chauhans faced the onslaught of the Muslims under Muhammad of Ghori. The Paramaras were also important Rajput rulers of this period. The most

important king was Bhoja. His military conquests as well as cultural contributions remain notable in the history of Rajputs.

Constant fighting weakened the Rajputs. Also, they never united against a common enemy. Their lack of political foresight and constant rivalries prevented any combined opposition to the Muslim invaders.

##### Arab Conquest of Sind (712 A.D.)

The religion Islam was born at Mecca in Arabia. Its founder was Prophet Muhammad. But his teachings made the wealthy people of Mecca his enemies. Therefore, he migrated to Medina in 622 A.D., which was the starting point of the Muslim calendar and the Muslim era called hijra. After eight years he returned to Mecca with his followers. He died in 632 A.D.

The followers of Muhammad set up an empire called the Caliphate. The Umayyads and the Abbasids were called the caliphs. They expanded their rule by conquests and spread their religion Islam. In 712 A.D., Muhammad bin Qasim invaded Sind. He was the commander of the Umayyad kingdom. Qasim defeated Dahir, the ruler of Sind and killed him in a well-contested battle. His capital Aror was captured. Qasim extended his conquest further into Multan. Qasim organized the administration of Sind. The people of Sind were given the status of *zimmis* (protected subjects). There was no interference in the lives and property of the people. Soon, Qasim was recalled by the Caliph.

However, Sind continued to be under the Arabs. But the Muslims could not expand their authority further into India due to the presence of the powerful Pratihara kingdom in western India. Although the conquest of Sind did not lead to further conquests immediately, it had resulted in the diffusion of Indian culture abroad. Many Arab travelers visited Sind. Indian medicine and astronomy were carried to far off lands through the Arabs. The Indian numerals in the Arabic form went to Europe through them. Since Sind was a part of the Arab empire, the inflow of Indian knowledge was great.

##### Mahmud of Ghazni and his Invasions

By the end of the ninth century A.D., the Abbasid Caliphate declined. The Turkish governors established independent kingdoms and the Caliph became only a ritual authority. One among them was Alptigin whose capital was MAHMUD OF GHAZNI. His successor and son-in-law Sabuktigin wanted to conquer India from the north-west. He succeeded in capturing Peshawar from Jayapala. But his raids did not produce a lasting effect. He was succeeded by his son, Mahmud

##### Mahmud of Ghazni (A.D. 997-1030).

Mahmud is said to have made seventeen raids into India. At that time, North India was divided into a number of Hindu states. On the frontier of India, there existed the Hindu Shahi kingdom which extended from the Punjab to Kabul. The other important kingdoms of north India

were Kanauj, Gujarat, Kashmir, Nepal, Malwa and Bundelkhand. The initial raids were against the Hindu Shahi kingdom in which its king Jayapala was defeated in 1001. After this defeat, Jayapala immolated himself because he thought that his defeat was a disgrace. His successor Anandapala fought against Mahmud but he was also defeated in the Battle of Waihind, the Hindu Shahi capital near Peshawar in 1008. In this battle, Anandapala was supported by the rulers of Kanauj and Rajasthan. As a result of his victory at Waihind, Mahmud extended his rule over most of the Punjab.

The subsequent raids of Mahmud into India were aimed at plundering the rich temples and cities of northern India. In 1011, he raided Nagarkot in the Punjab hills and Thaneshwar near Delhi. In 1018, Mahmud plundered the holy city of Mathura and also attacked Kanauj. The ruler of Kanauj, Rajyapala abandoned Kanauj and later died. Mahmud returned via Kalinjar with fabulous riches. His next important raid was against Gujarat. In 1024, Mahmud marched from Multan across Rajaputana, defeated the Solanki King Bhimadeva I, plundered Anhilwad and sacked the famous temple of Somanatha. Then, he returned through the Sind desert. This was his last campaign in India. Mahmud died in 1030 A.D.

Mahmud was not a mere raider and plunderer of wealth. He built a wide empire from the Punjab in the east to the Caspian sea on the west and from Samarkand in the north to Gujarat in the south. The Ghaznavid empire roughly included Persia, Trans-oxiana, Afghanistan and Punjab. His achievements were due to his leadership and restless activity. Mahmud was considered a hero of Islam by medieval historians. He also patronized art and literature. Firdausi was the poet-laureate in the court of Mahmud. He was the author of *Shah Namah*. Alberuni stayed in Mahmud's court and wrote the famous *Kitab-i-Hind*, an account on India. His conquest of Punjab and Multan completely changed the political situation in India. He paved the way for the Turks and Afghans for further conquests and made deeper incursions into the Gangetic valley at any time. He drained the resources of India by his repeated raids and deprived India of her manpower. The exhaustion of India's economic resources and man power had its adverse effect on the political future of India. The Hindu Shahi kingdom was guarding the gates of India against foreign invaders. Mahmud destroyed it and thus India's frontiers became defenceless. The inclusion of Punjab and Afghanistan in Ghazni's kingdom made the subsequent Muslim conquests of India comparatively easy.

### **Muhammad Ghori**

The Ghoris started as vassals of Ghazni but became independent after the death of Mahmud. Taking advantage of the decline of the Ghaznavid empire, Muizzuddin Muhammad popularly known as Muhammad Ghori brought Ghazni under their control. Having made his position strong and secure at Ghazni, Muhammad Ghori turned his attention to India. Unlike Mahmud of Ghazni, he wanted to conquer India and extend his empire in this direction.

In 1175, Muhammad Ghori captured Multan and occupied whole of Sind in his subsequent expeditions. In 1186 he attacked Punjab, captured it from Khusru Malik and annexed it to his dominions. The annexation of Punjab carried his dominion eastward to the Sutlej and led his invasion of the Chauhan kingdom.

### **The Battle of Tarain (1191-1192)**

Realising their grave situation, the Hindu princes of north India formed a confederacy under the command of Prithviraj Chauhan.

Prithviraj rose to the occasion, and defeated Ghori in the battle of Tarain near Delhi in 1191 A.D. Muhammad Ghori felt greatly humiliated by this defeat. To avenge this defeat he made serious preparations and gathered an army of 1,20,000 men. He came with this large force to Lahore via Peshawar and Multan. He sent a message to Prithviraj asking him to acknowledge his supremacy and become a Muslim. Prithviraj rejected this proposal and prepared to meet the invader. He gathered a large force consisting of 3,00,000 horses, 3000 elephants and a large body of foot soldiers. Many Hindu rajas and chieftains also joined him. In the ensuing Second Battle of Tarain in 1192, Muhammad Ghori thoroughly routed the army of Prithviraj, who was captured and killed.

The second battle of Tarain was a decisive battle. It was a major disaster for the Rajputs. Their political prestige suffered a serious setback. The whole Chauhan kingdom now lay at the feet of the invader. The first Muslim kingdom was thus firmly established in India at Ajmer and a new era in the history of India began. After his brilliant victory over Prithviraj at Tarain, Muhammad Ghori returned to Ghazni leaving behind his favourite general Qutb-ud-din Aibak to make further conquests in India. Aibak consolidated his position in India by occupying places like Delhi and Meerut. In 1193 he prepared the ground for another invasion by Muhammad Ghori. This invasion was directed against the Gahadavala ruler Jayachandra. Muhammad routed Jayachandra's forces. Kanauj was occupied by the Muslims after the battle of Chandawar. The Battles of Tarain and Chandawar contributed to the establishment of Turkish rule in India.

### **Causes for the failure of Hindu kingdoms**

The causes for the downfall of Hindu states have to be analysed historically. The most important cause was that they lacked unity. They were divided by factions. The Rajput princes exhausted one another by their mutual conflicts. Secondly, many Hindu states were declining in power. Their military methods were out of date and far inferior to those of Muslims. Indians continued to rely on elephants while the Muslims possessed quick-moving cavalry. The Muslims soldiers had better organization and able leaders. Their religious zeal and their greed for the greater wealth of India provided stimulus to them. Among the Hindus, the duty of fighting was confined to a particular class, the Kshatriyas. Moreover, the Hindus were always on the defensive, which was always a weak position.

## **Chapter 2 Delhi Sultanate**

### **Learning Objectives**

*Students will acquire knowledge about*

1. Political History of Delhi Sultanate.
2. Slave Dynasty - Aibak, Iltutmish, Raziya, Balban.
3. Khaljis - Alauddin Khalji's achievements.
4. Tughlaqs - Mahmud-bin-Tughlaq and his experiments.
5. Firoz Tughlaq and his administration.
6. Sayyids and Lodis.

The Muslim invasions into India had ultimately resulted in the establishment of Delhi Sultanate which existed from A.D. 1206 to 1526. Five different dynasties - the Slave, Khalji, Tughlaq, Sayyids and Lodis - ruled under

the Delhi Sultanate. Not only they extended their rule over North India, but also they penetrated into the Deccan and South India. Their rule in India resulted in far-reaching changes in society, administration and cultural life.

### Slave Dynasty

The Slave dynasty was also called Mamluk dynasty. Mamluk was the Quranic term for slave. The Slave dynasty ruled Delhi from A.D. 1206 to 1290. In fact, three dynasties were established during this period. They were

1. Qutbi dynasty (1206-1211) founded by Qutbuddin Aibak.
2. First Ilbari dynasty (1211- 1266) founded by Iltutmish.
3. Second Ilbari dynasty (1266-1290) founded by Balban.

### Qutbuddin Aibak (1206-1210)

Qutbuddin Aibak was a slave of Muhammad Ghori, who made him the Governor of his Indian possessions. He set up his military headquarters at Indraprasta, near Delhi. He raised a standing army and established his hold over north India even during the life time of Ghori. After the death of Ghori in 1206, Aibak declared his **Qutbuddin Aibak** independence. He severed all connections with the kingdom of Ghori and thus founded the Slave dynasty as well as the Delhi Sultanate. He assumed the title Sultan and made Lahore his capital. His rule lasted for a short period of four years. Muslim writers call Aibak *Lakh Baksh* or giver of lakhs because he gave liberal donations to them. Aibak patronized the great scholar Hasan Nizami. He also started the construction of after the name of a famous Sufi saint Khwaja Qutbuddin Bakhtiyar. It was later completed by Iltutmish. Aibak died suddenly while playing *chaugan* (horse polo) in 1210. He was succeeded by his son Aram Baksh, who was replaced by Iltutmish after eight months.

### Iltutmish (1211-1236)

Iltutmish belonged to the Ilbari tribe and hence his dynasty was named as Ilbari dynasty. His half brothers sold him as a slave to Aibak, who made him his-son-in-law by giving his daughter in marriage to him. Later Aibak appointed him as iqtadar of Gwalior. In 1211 Iltutmish defeated Aram Baksh and became Sultan. He shifted his capital from Lahore to Delhi. During the first ten years of his reign he concentrated on securing his throne from his rivals. In the meantime, Temujin popularly known as Chengiz Khan, the leader of the Mongols, started invading Central Asia. He defeated Jalaluddin Mangabarni, the ruler of Kwarizam. Mangabarni crossed the river Indus and sought asylum from Iltutmish. Iltutmish refused to give him shelter in order to save his empire from the onslaught of the Mongols. Fortunately for Iltutmish, Chengiz Khan returned home without entering into India. In fact, the Mongol policy of Iltutmish saved India from the wrath of Chengiz Khan. Iltutmish marched against Bengal and Bihar and reasserted his control over them. He also annexed Sind and Multan into the Delhi Sultanate. He suppressed the Rajput revolts and recovered Ranthampur, Jalor, Ajmir and Gwalior. He led an expedition against the Paramaras of Malwa but it was not successful. Iltutmish was a great statesman. He received the *mansur*, the letter of recognition, from the Abbasid Caliph in 1229 by which he became the legal sovereign ruler of India. Later he nominated his daughter Raziya as his successor. Thus the hereditary succession to Delhi Sultanate was initiated by Iltutmish. He patronized

many scholars and a number Sufi saints came to India during his reign. Minhaj-us-Siraj, Taj-ud-din., Nizam-ul-mulk Muhammad Janaidi, Malik Qutb-ud-din Hasan and Fakhrul-Mulk Isami were his contemporary scholars who added grandeur to his court. Apart from completing the construction of Qutb Minar at Delhi, the tallest stone tower in India (238 ft.), he built a magnificent mosque at Ajmir.

Iltutmish introduced the Arabic coinage into India and the silver *tanka* weighing 175 grams became a standard coin in medieval India. The silver *tanka* remained the basis of the modern rupee. Iltutmish had also created a new class of ruling elite of forty powerful military leaders, the Forty.

### Raziya (1236-1240)

Although Iltutmish nominated his daughter Raziya as his successor, the Qazi of Delhi and Wazir put Ruknuddin Feroz on the throne. When the governor of Multan revolted, Ruknuddin marched to suppress that revolt. Using this opportunity, Raziya with the support of Amirs of Delhi seized the throne of Delhi Sultanate. She appointed an Abyssinian slave Yakuth as Master of the Royal Horses. Also, Raziya discarded the female apparel and held the court with her face unveiled. She even went for hunting and led the army. This aroused resentment among the Turkish nobles. In 1240, Altunia, the governor of Bhatinda revolted against her. She went in person to suppress the revolt but Altunia killed Yakuth and took Raziya prisoner. In the meantime, the Turkish nobles put Bahram, another son of Iltutmish on the throne. However, Raziya won over her captor, Altunia, and after marrying him proceeded to Delhi. But she was defeated and killed.

The fall of Raziya paved the way for the ascendancy of the Forty. In the next six years, Bahram and Masud ruled Delhi. There ensued a struggle for supremacy between the Sultans and the nobles. In 1246 Balban succeeded in putting Nasiruddin Mahmud, a younger son of Iltutmish, as Sultan.

### Era of Balban (1246-1287)

Ghiyasuddin Balban, who was also known as Ulugh Khan, served as Naib or regent to Sultan Nasiruddin Mahmud. He also strengthened his position by marrying his daughter to the Sultan. Balban was all powerful in the administration but he had to face the intrigues of his rivals in the royal court. He had overcome all the difficulties. In 1266 Nasiruddin Mahmud died without issues and Balban ascended the throne.

Balban's experience as the regent made him to understand the problems of Delhi Sultanate. He knew that the real threat to the monarchy was from the nobles called the Forty. He was convinced that only by enhancing the power and authority of the monarchy he could face the problems. According to Balban the Sultan was God's shadow on earth and the recipient of divine grace. Balban introduced rigorous court discipline and new customs such as prostration and kissing the Sultan's feet to prove his superiority over the nobles. He also introduced the Persian festival of *Nauroz* to impress the nobles and people with his wealth and power. He stood forth as the champion of Turkish nobility. At the same time he did not share power with other nobles. Indian Muslims were not given important post in the government. He appointed spies to monitor the activities of the nobles.

Balban was determined to break the power of the Forty, the Turkish nobles. He spared only the most obedient nobles and eliminated all others by fair or foul means.



Malik Baqbaq, the governor of Badaun, was publicly flogged for his cruelty towards his servants. Haybat Khan, the governor of Oudh, was also punished for killing a man who was drunk. Sher Khan, the governor of Bhatinda was poisoned. Instead of expanding his kingdom, Balban paid more attention to the restoration of law and order. He established a separate military department - *diwan-i-arz* - and reorganized the army. The outskirts of Delhi were often plundered by the Mewatis. Balban took severe action against them and prevented such robberies. Robbers were mercilessly pursued and put to death. As a result, the roads became safe for travel.

In 1279, Tughril Khan, the governor of Bengal revolted against Balban. It was suppressed and he was beheaded. In the northwest the Mongols reappeared and Balban sent his son Prince Mahmud against them. But the prince was killed in the battle and it was a moral blow to the Sultan. Balban died in 1287. He was undoubtedly one of the main architects of the Delhi Sultanate. He enhanced the power of the monarchy. However, he could not fully safeguard India from the Mongol invasions.

When Balban died, one of his grandsons Kaiqubad was made the Sultan of Delhi. After four years of incompetent rule, Jalaluddin Khalji captured the throne of Delhi in 1290.

### **The Khalji Dynasty (1290-1320)**

The advent of the Khalji dynasty marked the zenith of Muslim imperialism in India. The founder of the Khalji dynasty was Jalaluddin Khalji. He was seventy years old when he came to power. He was generous and lenient. Malik Chhajju, nephew of Balban was allowed to remain the governor of Kara. His leniency was misunderstood as weakness. When Chhajju revolted, it was suppressed but he was pardoned. When the thugs (robbers) looted the country, they were allowed to go after a severe warning. In 1292 when Malik Chhajju revolted for the second time, he was replaced by his son-in-law, Alauddin Khalji. In 1296 Alauddin Khalji took an expedition to Devagiri and returned to Kara. During the reception there, Alauddin Khalji treacherously murdered his father-in-law Jalaluddin Khalji and usurped the throne of Delhi.

### **Alauddin Khalji (1296-1316)**

Alauddin Khalji made enormous gifts to the hostile nobles and Amirs of Delhi to win over them to his side. Those who still opposed him accession were punished severely. He framed regulations to control the nobles. He was convinced that the general prosperity of the nobles, intermarriages between noble families, inefficient spy-system and drinking liquor were the basic reasons for the rebellions. Therefore, he passed four ordinances. He confiscated the properties of the nobles. The intelligence system was reorganized and all the secret activities of the nobles were immediately reported to the Sultan. The public sale of liquor and drugs was totally stopped. Social gatherings and festivities without the permission of Sultan were forbidden. By such harsh measures his reign was free from rebellions.

### **Reforms of Alauddin Khalji**

Alauddin Khalji maintained a large permanent standing army and paid them in cash from the royal treasury. According to the Ferishta, he recruited 4,75,000 cavalrymen. He introduced the system of *dagh* (branding of horses) and prepared *huliya* (descriptive

list of soldiers). In order to ensure maximum efficiency, a strict review of army from time to time was carried out. The introduction of paying salaries in cash to the soldiers led to price regulations popularly called as Market Reforms. Alauddin Khalji established four separate markets in Delhi, one for grain; another for cloth, sugar, dried fruits, butter and oil; a third for horses, slaves and cattle; and a fourth for miscellaneous commodities. Each market was under the control of a high officer called *Shahna-i-Mandi*. The supply of grain was ensured by holding stocks in government store-houses. Regulations were issued to fix the price of all commodities. A separate department called Diwani Riyasat was created under an officer called *Naib-i-Riyasat*. Every merchant was registered under the Market department. There were secret agents called *munhiyans* who sent reports to the Sultan regarding the functioning of these markets. The Sultan also sent slave boys to buy various commodities to check prices. Violation of regulations was severely punished. Harsh punishment was given if any shopkeeper charged a higher price, or tried to cheat by using false weights and measures. Even during the famine the same price was maintained. We are not sure whether the market regulations in Delhi were also applied in the provincial capitals and towns.

Apart from market reforms, Alauddin Khalji took important steps in the land revenue administration. He was the first Sultan of Delhi who ordered for the measurement of land. Even the big landlords could not escape from paying land tax. Land revenue was collected in cash in order to enable the Sultan to pay the soldiers in cash. His land revenue reforms provided a basis for the future reforms of Sher Shah and Akbar.

### **Military Campaigns**

Alauddin Khalji sent his army six times against the Mongols. The first two were successful. But the third Mongol invader Khwaja came up to Delhi but they were prevented from entering into the capital city. The next three Mongol invasions were also dealt with severely. Thousands of Mongols were killed. The northwestern frontier was fortified and Gazi Malik was appointed to as the Warden of Marches to protect the frontier.

The military conquests of Alauddin Khalji include his expedition against Gujarat, Mewar and the Deccan. He sent Nusrat Khan and Ulugh Khan to capture Gujarat in 1299. The king and his daughter escaped while the queen was caught and sent to Delhi. Kafur, an eunuch, was also taken to Delhi and later he was made the Malik Naib - military commander. Then in 1301, Alauddin marched against Ranthampur and after a three month's siege it fell. The Rajput women committed *jauhar* or self-immolation.

Alauddin next turned against Chittor. It was the powerful state in Rajasthan. The siege lasted for several months. In 1303 Alauddin stormed the Chittor fort. Raja Ratan Singh and his soldiers fought valiantly but submitted. The Rajput women including Rani Padmini performed *jauhar*. This Padmini episode was graphically mentioned in the book *Padmavath* written by Jayasi.

Alauddin Khalji's greatest achievement was the conquest of Deccan and the far south. This region was ruled by four important dynasties - Yadavas of Devagiri, Kakatiyas of Warangal, Hoysalas of Dwarasamudra and the Pandyas of Madurai. In Alauddin sent Malik Kafur against the ruler of Devagiri,

Ramachandra Deva, who submitted and paid rich tributes. In 1309 Malik Kafur launched his campaign against Warangal. Its ruler Prataparudra Deva was defeated and enormous booty was collected from him. Malik Kafur's next target was the Hoysala ruler Vira Ballala III. He was defeated and a vast quantity of booty was seized and sent to Delhi. Kafur next marched against the Pandyas. Vira Pandya fled the capital Madurai and Kafur seized enormous wealth from the Pandya kingdom and returned to Delhi. Alauddin Khalji died in 1316. Although the Sultan was illiterate, he patronized poets like Amir Khusrau and Amir Hasan. He also built a famous gateway known as *Alai Darwaza* and constructed a new capital at Siri. Mubarak Shah and Khusru Shah were the successors of Alauddin Khalji. Ghazi Malik, the governor of Dipalpur, killed the Sultan Khusru Shah and ascended the throne of Delhi under the title of Ghiyasuddin Tughlaq in 1320.

### The Tughlaq Dynasty (1320-1414)

The founder of the Tughlaq dynasty was Ghiyasuddin Tughlaq. Ghiyasuddin Tughlaq sent his son Juna Khan to fight against Warangal. He defeated Prataparudra and returned with rich booty. Ghiyasuddin laid the foundation for Tughlaqabad near Delhi. Ulugh Khan was said to have treacherously killed his father and ascended the throne with the title Muhammad bin Tughlaq in 1325.

### Muhammad bin Tughlaq (1325-1351)

He was a very attractive character in the history of medieval India owing to his ambitious schemes and novel experiments. His enterprises and novel experiments ended in miserable failures because they were all far ahead of their time. He was very tolerant in religious matters. He maintained diplomatic relations with far off countries like Egypt, China and Iran. He also introduced many liberal and beneficial reforms. But all his reforms failed. Contemporary writers like Isami, Barani and Ibn Battuta were unable to give a correct picture about his personality. But, Muhammad bin Tughlaq was the only Delhi Sultan who had received a comprehensive literary, religious and philosophical education.

### Transfer of Capital

Muhammad bin Tughlaq wanted to make Devagiri his second capital so that he might be able to control South India better. In 1327 he made extensive preparations for the transfer of royal household and the ulemas and Sufis from Delhi to Devagiri, which was renamed as Daulatabad. When they resisted the Sultan enforced his orders ruthlessly and caused great hardship of the population of Delhi. The distance between these two places was more than 1500 kilometres. Many people died during the rigorous journey in the summer. After two years, the Sultan abandoned Daulatabad and asked them to return to Delhi.

### Token Currency

In 1329-30 Muhammad bin Tughlaq introduced a token currency.

There was a shortage of silver through out the world in the fourteenth century. Kublai Khan issued paper money in China. In the same manner, Muhammad bin Tughlaq issued copper coins at par with the value of the silver *tanka* coins. But he was not able to prevent forging the new coins. The goldsmiths began to forge the token coins on a large scale. Soon the new coins were not accepted in the markets. Finally, Muhammad bin Tughlaq stopped the circulation of token currency

and promised to exchange silver coins for the copper coins. Many people exchanged the new coins but the treasury became empty. According to the Barani, the heap of copper coins remained lying on roadside in Tughlaqabad.

### Taxation in Doab

The failure of these two experiments affected the prestige of the Sultan and enormous money was wasted. In order to overcome financial difficulties, Muhammad bin Tughlaq increased the land revenue on the farmers of Doab (land between Ganges and Yamuna rivers). It was an excessive and arbitrary step on the farmers. A severe famine was also ravaging that region at that time. It had resulted in a serious peasant revolts. They fled from the villages but Muhammad bin Tughlaq took harsh measures to capture and punish them. The revolts were crushed.

### Agricultural Reforms

However, the Sultan realized later that adequate relief measures and the promotion of agriculture were the real solution to the problem. He launched a scheme by which *takkavi* loans (loans for cultivation) were given to the farmers to buy seed and to extend cultivation. A separate department for agriculture, *Diwan-i-Kohi* was established. Model farm under the state was created in an area of 64 square miles for which the government spent seventy lakh *tankas*. This experiment was further continued by Firoz Tughlaq.

### Rebellions

The latter part of Muhammad bin Tughlaq's reign witnessed a spate of rebellions by the nobles and provincial governors. The rebellion of Hasan Shah resulted in the establishment of the Madurai Sultanate. In 1336 the Vijayanagar kingdom was founded. In 1347 Bhamini kingdom was established. The governors of Oudh, Multan and Sind revolted against the authority of Muhammad bin Tughlaq. In Gujarat Taghi rose in revolt against the Sultan who spent nearly three years in chasing him. Muhammad bin Tughlaq's health became worse and he died in 1351. According to Baduani, the Sultan was freed from his people and the people from the Sultan. According to Barani, Muhammad bin Tughlaq was a mixture of opposites. His reign marked the beginning of the process of its decline.

### Firoz Tughlaq (1351-1388)

After the death of Muhammad bin Tughlaq in 1351 Firoz Tughlaq had the unique distinction of being chosen as sultan by the nobles. He appointed *Khan-i-Jahan* Maqbal, a Telugu Brahmin convert as wazir (prime minister). The wazir helped the Sultan in his administration and maintained the prestige of the Sultanate during this period.

### Military Campaigns

After his accession Firoz had to face the problem of preventing the disintegration of the Delhi Sultanate. He tried to safeguard his authority over north India instead of reasserting his authority over the Deccan and south India. He led two expeditions to Bengal but they were not successful. Bengal became free from the control of Delhi Sultanate. Firoz led a campaign against Jajnagar (modern Orissa). He returned with rich booty acquired from the temples. He marched against Nagarkot and made its ruler to pay tributes. During this campaign the Sultan collected 1300 Sanskrit manuscripts from the Jawalamukhi temple library and got them translated into Persian. Firoz next marched against Thatta in the Sind region and crushed a rebellion there.

## Administrative Reforms

The reign of Firoz Tughlaq was more notable for his administration. He strictly followed the advice of the ulemas in running the administration. He pleased the nobles and assured hereditary succession to their properties. Thus the iqta system was not only revived but also it was made hereditary. As per the Islamic law he levied the taxes. Jiziya was strictly imposed on non-Muslims. He was the first Sultan to impose irrigation tax. But at the same time he dug irrigation canals and wells. The longest canal was about 200 kilometres from Sutlej to Hansi. Another canal was between Yamuna and Hissar. There were about 1200 fruit gardens in and around Delhi yielding more revenue. The special tax on 28 items was abolished by him since they were against the Islamic law. He also developed royal factories called *karkhanas* in which thousands of slaves were employed. About 300 new towns were built during his reign. The famous among them was Firozabad near Red Fort in Delhi, now called Firoz Shah Kotla. Old monuments like Jama Masjid and Qutb-Minar were also repaired.

A new department called *Diwan-i-Khairat* was created to take care of orphans and widows. Free hospitals and marriage bureaus for poor Muslims were also established. Firoz patronized scholars like Barani and Afif. As he was guided by the ulemas, he was intolerant towards Shia Muslims and Sufis. He treated Hindus as second grade citizens and imposed Jiziya. In this respect he was the precursor of Sikandar Lodi and Aurangzeb. Also he increased the number of slaves by capturing the defeated soldiers and young persons. In his regime the number of slaves had increased to one lakh eighty thousand. When Firoz died in 1388 the struggle for power between the Sultan and the nobles started once again. His successors had to face the rebellion of the slaves created by Firoz.

In the following years, the Delhi Sultanate had disintegrated further. Many provinces like Malwa and Gujarat declared their independence. The invasion of Timur in 1398 had worsened the situation. When Timur entered Delhi there was no opposition and he sacked Delhi for three days murdering thousands of people and looting enormous wealth. He withdrew from India in 1399 and his invasion in fact delivered a death blow to the Tughlaq dynasty.

## Sayyids (1414-1451)

Before his departure from India, Timur appointed Khizr Khan as governor of Multan. He captured Delhi and founded the Sayyid dynasty in 1414. He tried to consolidate the Delhi Sultanate but in vain. He died in 1421 and was succeeded by his son, Mubarak Shah. Muhammad Shah who succeeded him was always busy against conspirators and gradually lost control over his nobles. Bahlul Khan Lodi dominated everything. Muhammad Shah died in 1445 and was succeeded by his son Alam Shah (1445-1451) the weakest of the Sayyid princes. He handed over the throne to Bahlul Lodi and retired to Badaun.

## Lodis (1451-1526)

The Lodis, who succeeded Sayyids, were Afghans. Bahlul Lodi was the first Afghan ruler while his predecessors were all Turks. He died in 1489 and was succeeded by his son, Sikandar Lodi. Sikandar Lodi (1489-1517) was the greatest of the three Lodi sovereigns. He brought the whole of Bihar under his control, many Rajput chiefs were defeated. He attacked Bengal and forced its ruler to conclude a treaty

with him, and extended his empire from the Punjab to Bihar. He was a good administrator. Roads were laid and many irrigational facilities were provided for the benefit of the peasantry. Despite certain laudable qualities, he was a bigot. He destroyed many Hindu temples and imposed many restrictions on the Hindus. Yet, he was one of the great Lodi sultans who made the sultanate strong and powerful.

## Chapter 3 India Under The Delhi Sultanate

### Learning Objectives

*Students will acquire knowledge about*

1. Administration under the Delhi Sultanate.
2. Economic Condition under the Delhi Sultanate.
3. Social Life under the Delhi Sultanate.
4. Art and architecture of the Delhi Sultanate.
5. Literary Development.

### Administration

The establishment and expansion of the Delhi Sultanate led to the evolution of a powerful and efficient administrative system. At its zenith the authority of Delhi Sultan had extended as far south as Madurai. Although the Delhi Sultanate had disintegrated, their administrative system made a powerful impact on the Indian provincial kingdoms and later on the Mughal system of administration.

The Delhi Sultanate was an Islamic state with its religion Islam. The Sultans considered themselves as representatives of the Caliph. They included the name of the Caliph in the *khutba* or prayer and inscribed it on their coins. Although Balban called himself the shadow of God, he continued to practice of including the name of Caliph in the *khutba* and coins. Iltutmish, Muhammad bin Tughlaq and Firoz Tughlaq obtained *mansur* or letter of permission from the Caliph.

The office of the Sultan was the most important in the administrative system. He was the ultimate authority for the military, legal and political activities. There was no clear law of succession during this period. All the sons had equal claim to the throne. Iltutmish even nominated his daughter in preference to his sons. But such nominations or successions were to be accepted by the nobles. Sometimes *ulemas* played crucial role in accepting the succession to the throne. However, the military superiority remained the main factor in matters of succession.

### Central Government

The Sultan was assisted by a number of departments and officials in his administration. The post of *Naib* was the most powerful one. The *Naib* practically enjoyed all the powers of the Sultan and exercised general control over all the departments. Next to him was the *Wazir* who was heading the finance department called *Diwani Wizarat*.

The military department was called *Diwani Ariz*. It was headed by *Ariz-i-mumalik*. He was responsible for recruiting the soldiers and administering the military department. He was not the commander-in-chief of the army. The Sultan himself was the commander-in-chief of the army. The military department was first set up by Balban and it was further improved by Alauddin Khalji under whom the strength of the army crossed three lakh soldiers. Alauddin introduced the system of branding of the horses and payment of salary in cash. Cavalry was given importance under the Delhi Sultanate.



*Diwani Rasalat* was the department of religious affairs. It was headed by chief *Sadr*. Grants were made by this department for the construction and maintenance of mosques, tombs and *madrasas*. The head of the judicial department was the chief *Qazi*. Other judges or *qazis* were appointed in various parts of the Sultanate. Muslim personal law or *sharia* was followed in civil matters. The Hindus were governed by their own personal law and their cases were dispensed by the village *panchayats*. The criminal law was based on the rules and regulations made by the Sultans. The department of correspondence was called *Diwani Insha*. All the correspondence between the ruler and the officials was dealt with by this department.

### Local Administration

The provinces under the Delhi Sultanate were called *iqtas*. They were initially under the control of the nobles. But the governors of the provinces were called the *muqtis* or *walis*. They were to maintain law and order and collect the land revenue. The provinces were divided into *shiqs* and the next division was *pargana*. The *shiq* was under the control of *shiqdar*. The *pargana* comprising a number of villages was headed by *amil*. The village remained the basic unit of the administration. The village headman was known as *muqaddam* or *chaudhri*. The village accountant was called *patwari*.

### Economy

After consolidating their position in India, the Delhi Sultans introduced reforms in the land revenue administration. The lands were classified into three categories:

1. *iqta* land - lands assigned to officials as *iqtas* instead of payment for their services.
2. *khalisa* land - land under the direct control of the Sultan and the revenues collected were spent for the maintenance of royal court and royal household.
3. *inam* land - land assigned or granted to religious leaders or religious institutions.

The peasantry paid one third of their produce as land revenue, and sometimes even one half of the produce. They also paid other taxes and always led a hand-to-mouth living. Frequent famines made their lives more miserable.

However, Sultans like Muhammad bin Tughlaq and Firoz Tughlaq took efforts to enhance agricultural production by providing irrigational facilities and by providing *takkavi* loans. They also encouraged the farmers to cultivate superior crop like wheat instead of barley. Firoz encouraged the growth of horticulture. Muhammad bin Tughlaq created a separate agricultural department, *Diwani Kohi*.

During the Sultanate period, the process of urbanization gained momentum. A number of cities and towns had grown during this period. Lahore, Multan, Broach, Anhilwara, Laknauti, Daulatabad, Delhi and Jaunpur were important among them. Delhi remained the largest city in the East. The growth of trade and commerce was described by contemporary writers. India exported a large number of commodities to the countries on the Persian Gulf and West Asia and also to South East Asian countries. Overseas trade was under the control of *Multanis* and Afghan Muslims. Inland trade was dominated by the Gujarat *Marwari* merchants and Muslim *Bohra* merchants. Construction of roads and their maintenance facilitated for smooth transport and communication. Particularly the royal roads were kept

in good shape. *Sarais* or rest houses on the highways were maintained for the convenience of the travelers. Cotton textile and silk industry flourished in this period. Sericulture was introduced on a large scale which made India less dependent on other countries for the import of raw silk. Paper industry had grown and there was an extensive use of paper from 14<sup>th</sup> and 15<sup>th</sup> centuries. Other crafts like leather-making, metal-crafts and carpet-weaving flourished due to the increasing demand. The royal *karkhanas* supplied the goods needed to the Sultan and his household. They manufactured costly articles made of gold, silver and gold ware. The nobles also aped the life style of Sultans and indulged in luxurious life. They were well paid and accumulated enormous wealth.

The system of coinage had also developed during the Delhi Sultanate. Iltutmish issued several types of silver *tankas*. One silver *tanka* was divided into 48 jitals during the Khalji rule and 50 *jitals* during the Tughlaq rule. Gold coins or *dinars* became popular during the reign of Alauddin Khalji after his South Indian conquests. Copper coins were less in number and dateless. Muhammad bin Tughlaq had not only experimented token currency but also issued several types of gold and silver coins. They were minted at eight different places. At least twenty five varieties of gold coins were issued by him.

### Social Life

There was little change in the structure of the Hindu society during this period. Traditional caste system with the Brahmins on the upper strata of the society was prevalent. The subservient position of women also continued and the practice of sati was widely prevalent. The seclusion of women and the wearing of *purdah* became common among the upper class women. The Arabs and Turks brought the *purdah* system into India and it became widespread among the Hindu women in the upper classes of north India.

During the Sultanate period, the Muslim society remained divided into several ethnic and racial groups. The Turks, Iranians, Afghans and Indian Muslims developed exclusively and there were no intermarriages between these groups. Hindu converts from lower castes were also not given equal respect. The Muslim nobles occupied high offices and very rarely the Hindu nobles were given high position in the government. The Hindus were considered *zimmi*s or protected people for which they were forced to pay a tax called *jiziya*. In the beginning *jiziya* was collected as part of land tax. Firoz Tughlaq separated it from the land revenue and collected *jiziya* as a separate tax. Sometimes Brahmins were exempted from paying *jiziya*.

### Art and Architecture

The art and architecture of the Delhi Sultanate period was distinct from the Indian style. The Turks introduced arches, domes, lofty towers or *minarets* and decorations using the Arabic script. They used the skill of the Indian stone cutters. They also added colour to their buildings by using marbles, red and yellow sand stones. In the beginning, they converted temples and other structures demolished into mosques. For example, the *Quwwat-ul-Islam* mosque near *Qutub Minar* in Delhi was built by using the materials obtained from destroying many Hindu and Jain temples. But later, they began to construct new structures. The most magnificent building of the 13<sup>th</sup> century was the *Qutub Minar* which was founded by Aibek and completed by Iltutmish. This seventy one metre tower was dedicated

to the *Sufi* saint Qutbuddin Bakhtiyar Kaki. The balconies of this tower were projected from the main building and it was the proof of the architectural skills of that period. Later, Alauddin Khalji added an entrance to the *Qutub Minar* called *Alai Darwaza*. The dome of this arch was built on scientific lines.

The buildings of the Tughlaq period were constructed by combining arch and dome. They also used the cheaper and easily available grey colour stones. The palace complex called Tughlaqabad with its beautiful lake was built during the period of Ghyasuddin Tughlaq. Muhammad bin Tughlaq built the tomb of Ghyasuddin on a high platform. The Kotla fort at Delhi was the creation of Firoz Tughlaq. The Lodi garden in Delhi was the example for the architecture of the Lodis.

## Music

New musical instruments such as *sarangi* and *rabab* were introduced during this period. Amir Khusrau introduced many new *ragas* such as *ghora* and *sanam*. He evolved a new style of light music known as *qawali* by blending the Hindu and Iranian systems. The invention of *sitar* was also attributed to him. The Indian classical work *Ragadarpan* was translated into Persian during the reign of Firoz Tughlaq. Pir Bhodan, a *Sufi* saint was one of the great musicians of this period. Raja Man Singh of Gwalior was a great lover of music. He encouraged the composition of a great musical work called *Man Kautuhul*.

## Literature

The Delhi Sultans patronized learning and literature. Many of them had great love for Arabic and Persian literature. Learned men came from Persia and Persian language got encouragement from the rulers. Besides theology and poetry, the writing of history was also encouraged. Some of the Sultans had their own court historians.

The most famous historians of this period were Hasan Nizami, Minhaj-us-Siraj, Ziauddin Barani, and Shams-Siraj Afif. Barani's *Tarikh-i-Firoz Shahi* contains the history of Tughlaq dynasty. Minhaj-us-Siraj wrote *Tabaqat-i-Nasari*, a general history of Muslim dynasties <sup>AMIR KHUSRAU</sup> up to 1260.

Amir Khusrau (1252-1325) was the famous Persian writer of this period. He wrote a number of poems. He experimented with several poetical forms and created a new style of Persian poetry called *Sabaq-i-Hind* or the Indian style. He also wrote some Hindi verses. Amir Khusrau's *Khazain-ul-Futuh* speaks about Alauddin's conquests. His famous work *Tughlaq Nama* deals with the rise of Ghyasuddin Tughlaq.

Sanskrit and Persian functioned as link languages in the Delhi Sultanate. Zia Nakshabi was the first to translate Sanskrit stories into Persian. The book *Tutu Nama* or Book of the Parrot became popular and translated into Turkish and later into many European languages. The famous *Rajatarangini* written by Kalhana belonged to the period of Zain-ul-Abidin, the ruler of Kashmir. Many Sanskrit works on medicine and music were translated into Persian.

## Chapter 4 Learning Objectives

*Students will acquire knowledge about*

1. Rise and spread of Bhakti Movement in India.
2. Sufism and its development in India.
3. Bhakti saints like Sankara, Ramanuja and others.

4. Ramananda, Kabir and Guru Nanak and their teachings.

5. Bhakti Movement in Bengal and Maharashtra.

6. Importance of Bhakti Movement.

## BHAKTI MOVEMENT IN MEDIEVAL INDIA

We have already studied the rise of Bhakti cult in Tamil Nadu during the seventh and eighth centuries. The Saivaite Nayanmars and Vashnavaites Alvars preached the Bhakti cult under the Pallavas, Pandyas and Cholas. But, the spread of Bhakti movement in medieval India is a different kind. This medieval Bhakti movement was the direct result of the influence of the spread of Islam in India.

Monotheism or belief in one God, equality and brotherhood of man and rejection of rituals and class divisions are the distinctive characteristics of Islam.

These Islamic ideas created a profound impact on the religious leaders of this period.

Moreover, the preaching of Sufi teachers shaped the thinking of Bhakti reformers like Ramananda, Kabir and Nanak.

## Sufism

Sufism was a liberal reform movement within Islam. It had its origin in Persia and spread into India in the eleventh century. The first Sufi saint Shaikh Ismail of Lahore started preaching his ideas. The most famous of the Sufi saints of India was Khwaja Muinuddin Chishti, who settled in Ajmer which became the centre of his activities. He had a number of disciples who are called Sufis of the Chishti order. Another well known Sufi saint was Bahauddin Zakariya who came under the influence of another famous mystic Shihabuddin Suhrawardi. His branch of Sufi saints was known as the Sufis of the Suhrawardi Order. Yet another famous Sufi saint was Nizamuddin Auliya who belonged to the Chishti order and who was a mighty spiritual force. These Sufi saints are revered even today by not only Muslims but by a large number of Hindus. Their tombs have become popular places of pilgrimage for both communities. Sufism stressed the elements of love and devotion as effective means of the realisation of God. Love of God meant love of humanity and so the Sufis believed service to humanity was tantamount to service to God. In Sufism, self discipline was considered an essential condition to gain knowledge of God by sense of perception. While orthodox Muslims emphasise external conduct, the Sufis lay stress on inner purity. While the orthodox believe in blind observance of rituals, the Sufis consider love and devotion as the only means of attaining salvation. According to them one must have the guidance of a *pir* or *guru*, without which spiritual development is impossible. Sufism also inculcated a spirit of tolerance among its followers. Other ideas emphasised by Sufism are meditation, good actions, repentance for sins, performance of prayers and pilgrimages, fasting, charity and suppression of passions by ascetic practices.

These liberal and unorthodox features of Sufism had a profound influence on medieval Bhakti saints. In the later period, Akbar, the Mughal emperor, appreciated Sufi doctrines which shaped his religious outlook and religious policies. When the Sufi movement was becoming popular in India, about the same time the Bhakti cult was gaining strength among the Hindus. The two parallel movements based on the doctrines of love and selfless devotion contributed a great deal to bringing

the two communities closer together. However, this trend did not last long.

### Bhakti Movement

In the ninth century **Sankara** started a Hindu revivalist movement giving a new orientation to Hinduism. He was born in Kaladi in Kerala. His doctrine of *Advaita* or Monism was too abstract to appeal to the common man. Moreover, there was a reaction against the *Advaita* concept of *Nirgunabrahman* (God without attributes) with the emergence of the idea of *Sagunabrahman* (God with attributes).

In the twelfth century, **Ramanuja**, who was born at Sriperumbudur near modern Chennai, preached *Visishtadvaita*.

In the thirteenth century, **Madhava** from Kannada region propagated *Dvaita* or dualism of *Jivatma* and *Paramatma*. According to his philosophy, the world is not an illusion but a reality. God, soul, matter are unique in nature. **Nimbarka** and **Vallabhacharya** were also other preachers of Vaishnavite Bhakti in the Telungana region. **Suradas** was the disciple of Vallabhacharya and he popularized Krishna cult in north India. **Mirabai** was a great devotee of Krishna and she became popular in Rajasthan for her bhajans. **Tulsidas** was a worshipper of Rama and composed the famous *Ramcharitmanas*, the Hindi version of Ramayana.

In the fourteenth and fifteenth centuries, **Ramananda**, **Kabir** and **Nanak** remained great apostles of the Bhakti cult. They drew inspiration from old masters but showed a new path. They helped the common people to shed age-old superstitions and attain salvation through *Bhakti* or pure devotion. Unlike the early reformers, they were not linked with any particular religious creed and did not believe in rituals and ceremonies. They condemned polytheism and believed in one god. They also denounced all forms of idolatry. They strongly believed in *Bhakti* as the only means of salvation. They also emphasised the fundamental unity of all religions.

### Ramananda

Ramananda was born at Allahabad. He was originally a follower of Ramanuja. Later he founded his own sect and preached his principles in Hindi at Banaras and Agra. He was a worshipper of Rama. He was the first to employ the vernacular medium to propagate his ideas. Simplification of worship and emancipation of people from the traditional caste rules were his two important contributions to the *Bhakti* movement. He opposed the caste system and chose his disciples from all sections of society disregarding caste. His disciples were: a) Kabir, a Muslim weaver b) Raidasa, a cobbler c) Sena, a barber d) Sadhana, a butcher e) Dhanna, a Jat farmer f) Naraharai, a goldsmith and g) Pipa, a Rajput prince.

Among the disciples of Ramananda the most famous was Kabir. He was born near Banaras to a brahmin widow. But he was brought up by a Muslim couple who were weavers by profession.

He possessed an inquiring mind and while in Benares learnt much about Hinduism. He became familiar with Islamic teachings also and Ramananda initiated him into the higher knowledge of Hindu and Muslim religious and philosophical ideas. Kabir's object was to reconcile Hindus and Muslims and establish harmony between the two sects. He denounced idolatry and rituals and laid great emphasis on **KABIR** the equality of man before God. He emphasized the essential oneness of all religions by describing Hindus and Muslims 'as pots of the same clay'. To him Rama and Allah, temple and mosque were the same. He regarded devotion to god as

an effective means of salvation and urged that to achieve this one must have a pure heart, free from cruelty, dishonesty, hypocrisy and insincerity. He is regarded as the greatest of the mystic saints and his followers are called Kabirpanthis.

### Guru Nanak

Another well-known saint-preacher of the medieval period was Guru Nanak, founder of the Sikh religion and a disciple of Kabir.

He was born in Talwandi near Lahore. He denounced caste distinctions and rituals like bathing in holy rivers. His conception of religion was highly practical and sternly ethical. He exhorted people to give up selfishness, falsehood and hypocrisy and to lead a life of truth, honesty and kindness. 'Abide pure amidst the impurities of the world' was one of his famous sayings. His life was dedicated to establishing harmony between Hindus and Muslims. His followers were known as Sikhs.

**Chaitanya** was another well-known saint and reformer of Bengal who popularised the Krishna cult. He renounced the world, became an ascetic and wandered all over the country preaching his ideas. He proclaimed the universal brotherhood of man and condemned all distinction based on religion and caste. He emphasised love and peace and showed great sympathy to the sufferings of other people, especially that of the poor and the weak. He believed that through love and devotion, song and dance, a devotee can feel the presence of God. He accepted disciples from all classes and castes and his teachings are widely followed in Bengal even today.

**Gnanadeva** was the founder of the Bhakti Movement in Maharashtra in the thirteenth century. It was called Maharashtra dharma. He wrote a commentary of *Bhagavat Gita* called *Gnaneswari*. **Namadeva** preached the gospel of love. He opposed idol worship and priestly domination. He also opposed the caste system. In the sixteenth century, **Ekanatha** opposed caste distinctions and sympathetic towards the lower castes. He composed many lyrics and his bhajans and kirtans were famous. Another Bhakti saint of Maharashtra was **Tukaram**, a contemporary of Sivaji. He was responsible for creating a background for Maratha nationalism. He opposed all social distinctions.

### Importance of the Bhakti Movement

The importance of the Bhakti movement was very great. Various preachers spoke and wrote in the regional languages. So, the Bhakti movement provided an impetus for the development of regional languages such as Hindi, Marathi, Bengali, Kannada, etc. Through these languages they made direct appeal to the masses. As the caste system was condemned by the Bhakti saints, the lower classes were raised to a position of great importance. The importance of women in society was also increased because the Bhakti movement gave equal importance to them. Moreover, the Bhakti movement gave to the people a simple religion, without complicated rituals. They were required to show sincere devotion to God. The new idea of a life of charity and service to fellow people developed.

## Chapter 5

### Vijayanagar And Bahmani Kingdoms

#### Learning Objectives

Students will acquire knowledge about

1. Sources for the study of Vijayanagar Empire.
2. Political History of the Vijayanagar Empire.



3. *Administration and Social life.*
4. *Economic Condition and Cultural contributions.*
5. *A brief history of the Bahmani kingdom.*

## VIJAYANAGAR EMPIRE

### Sources

The history of Vijayanagar Empire constitutes an important chapter in the history of India. Four dynasties - Sangama, Saluva, Tuluva and Aravidu - ruled Vijayanagar from A.D. 1336 to 1672. The sources for the study of Vijayanagar are varied such as literary, archaeological and numismatics. Krishnadevaraya's Amukthamalyada, Gangadevi's Maduravijayam and Allasani Peddanna's Manucharitam are some of the indigenous literature of this period.

Many foreign travelers visited the Vijayanagar Empire and their accounts are also valuable. The Moroccan traveler, Ibn Battuta, Venetian traveler Nicolo de Conti, Persian traveler Abdur Razzak and the Portuguese traveler Domingo Paes were among them who left valuable accounts on the socio-economic conditions of the Vijayanagar Empire.

The copper plate inscriptions such as the Srirangam copper plates of Devaraya II provide the genealogy and achievements of Vijayanagar rulers. The Hampi ruins and other monuments of Vijayanagar provide information on the cultural contributions of the Vijayanagar rulers. The numerous coins issued by the Vijayanagar rulers **IBN BATTUTA** contain figures and legends explaining their titles and achievements.

### Political History

Vijayanagar was founded in 1336 by Harihara and Bukka of the Sangama dynasty. They were originally served under the Kakatiya rulers of Warangal. Then they went to Kampili where they were imprisoned and converted to Islam. Later, they returned to the Hindu fold at the initiative of the saint Vidyaranya. They also proclaimed their independence and founded a new city on the south bank of the Tungabhadra river. It was called Vijayanagar meaning city of victory.

The decline of the Hoysala kingdom enabled Harihara and Bukka to expand their newly founded kingdom. By 1346, they brought the whole of the Hoysala kingdom under their control. The struggle between Vijayanagar and Sultanate of Madurai lasted for about four decades. Kumarakampana's expedition to Madurai was described in the Maduravijayam. He destroyed the Madurai Sultans and as a result, the Vijayanagar Empire comprised the whole of South India up to Rameswaram. The conflict between Vijayanagar Empire and the Bahmani kingdom lasted for many years. The dispute over Raichur Doab, the region between the rivers Krishna and Tungabhadra and also over the fertile areas of Krishna-Godavari delta led to this long-drawn conflict. The greatest ruler of the Sangama dynasty was Deva Raya II. But he could not win any clear victory over the Bahmani Sultans. After his death, Sangama dynasty became weak. The next dynasty, Saluva dynasty founded by Saluva Narasimha reigned only for a brief period (1486-1509).

### Krishna Deva Raya (1509 - 1530)

The Tuluva dynasty was founded by Vira Narasimha. The greatest of the Vijayanagar rulers, Krishna Deva Raya belonged to the Tuluva dynasty. He possessed great military ability. His imposing personality was accompanied by high intellectual quality. His first task was to check the invading Bahmani forces. By that time the Bahmani kingdom was replaced by Deccan Sultanates. The Muslim armies were decisively

defeated in the battle of Diwani by Krishna Deva Raya. Then he invaded Raichur Doab which had resulted in the confrontation with the Sultan of Bijapur, Ismail Adil Shah. But,

Krishna Deva Raya defeated him and captured the city of Raichur in 1520. From there he marched on Bidar and captured it.

Krishna Deva Raya's Orissa campaign was also successful. He defeated the Gajapati ruler Prataparudra and conquered the whole of Telungana. He maintained friendly relations with the Portuguese. Albuquerque sent his ambassadors to Krishna Deva Raya.

Though a Vaishnavite, he respected all religions. He was a great patron of literature and art and he was known as Andhra Bhoja. Eight eminent scholars known as Ashtadiggajas were at his royal court. Allasani Peddanna was the greatest and he was called Andhrakavita Pitamaha. His important works include *Manucharitam* and *Harikathasaram*. Pingali Suranna and Tenali Ramakrishna were other important scholars. Krishna Deva Raya himself authored a Telugu work, *Amukthamalyadha* and Sanskrit works, *Jambavati Kalyanam* and *Ushaparinayam*.

He repaired most of the temples of south India. He also built the famous Vittalaswamy and Hazara Ramaswamy temples at Vijayanagar. He also built a new city called Nagalapuram in memory of his queen Nagaladevi. Besides, he built a large number of Rayagopurams.

After his death, Achutadeva and Venkata succeeded the throne. During the reign of Rama Raya, the combined forces of Bijapur, Ahmadnagar, Golkonda and Bidar defeated him at the Battle of Talaikotta in 1565. This battle is also known as Raksasa Thangadi. Rama Raya was imprisoned and executed. The city of Vijayanagar was destroyed. This battle was generally considered to mark the end of the Vijayanagar Empire. However, the Vijayanagar kingdom existed under the Aravidu dynasty for about another century. Thirumala, Sri Ranga and Venkata II were the important rulers of this dynasty. The last ruler of Vijayanagar kingdom was Sri Ranga III.

### Administration

The administration under the Vijayanagar Empire was well organized. The king enjoyed absolute authority in executive, judicial and legislative matters. He was the highest court of appeal. The succession to the throne was on the principle of hereditary. Sometimes usurpation to the throne took place as Saluva Narasimha came to power by ending the Sangama dynasty. The king was assisted by a council of ministers in his day to day administration.

The Empire was divided into different administrative units called Mandalams, Nadus, *sthalas* and finally into gramas. The governor of Mandalam was called Mandaleswara or Nayak. Vijayanagar rulers gave full powers to the local authorities in the administration. Besides land revenue, tributes and gifts from vassals and feudal chiefs, customs collected at the ports, taxes on various professions were other sources of income to the government. Land revenue was fixed generally one sixth of the produce. The expenditure of the government includes personal expenses of king and the charities given by him and military expenditure. In the matter of justice, harsh punishments such as mutilation and throwing to elephants were followed.

The Vijayanagar army was well-organized and efficient. It consisted of the cavalry, infantry, artillery and elephants. High-breed horses were procured from foreign traders. The top-grade officers of the army were

known as Nayaks or Poligars. They were granted land in lieu of their services. These lands were called *amaram*. Soldiers were usually paid in cash.

### Social Life

Allasani Peddanna in his *Manucharitam* refers to the existence of four castes - Brahmins, Kshatriyas, Vaisyas and Sudras - in the Vijayanagar society. Foreign travelers left vivid accounts on the splendour of buildings and luxurious social life in the city of Vijayanagar. Silk and cotton clothes were mainly used for dress. Perfumes, flowers and ornaments were used by the people. Paes mentions of the beautiful houses of the rich and the large number of their household servants. Nicolo Conti refers to the prevalence of slavery. Dancing, music, wrestling, gambling and cock-fighting were some of the amusements.

The Sangama rulers were chiefly Saivaites and Virupaksha was their family deity. But other dynasties were Vaishnavites. Srivaishnavism of Ramanuja was very popular. But all kings were tolerant towards other religions. Barbosa referred to the religious freedom enjoyed by everyone. Muslims were employed in the administration and they were freely allowed to build mosques and worship. A large number of temples were built during this period and numerous festivals were celebrated. The Epics and the Puranas were popular among the masses.

The position of women had not improved. However, some of them were learned. Gangadevi, wife of Kumarakampana authored the famous work *Maduravijayam*. Hannamma and Thirumalamma were famous poets of this period. According to Nuniz, a large number of women were employed in royal palaces as dancers, domestic servants and palanquin bearers. The attachment of dancing girls to temples was in practice. Paes refers to the flourishing *devadasi* system. Polygamy was prevalent among the royal families. Sati was honoured and Nuniz gives a description of it.

### Economic Condition

According to the accounts of the foreign travelers, the Vijayanagar Empire was one of the wealthiest parts of the world at that time. Agriculture continued to be the chief occupation of the people. The Vijayanagar rulers provided a stimulus to its further growth by providing irrigation facilities. New tanks were built and dams were constructed across the rivers like Tungbhadra. Nuniz refers to the excavation of canals.

There were numerous industries and they were organized into guilds. Metal workers and other craftsmen flourished during this period. Diamond mines were located in Kurnool and Anantapur district. Vijayanagar was also a great centre of trade. The chief gold coin was the *varaha* but weights and measures varied from place to place. Inland, coastal and overseas trade led to the general prosperity. There were a number of seaports on the Malabar coast, the chief being Cannanore. Commercial contacts with Arabia, Persia, South Africa and Portugal on the west and with Burma, Malay peninsula and China on the east flourished. The chief items of exports were cotton and silk clothes, spices, rice, iron, saltpeter and sugar. The imports consisted of horses, pearls, copper, coral, mercury, China silk and velvet clothes. The art of shipbuilding had developed.

### Cultural Contributions

The temple building activity further gained momentum during the Vijayanagar rule. The chief characteristics of the Vijayanagara architecture were the construction of

tall Raya Gopurams or gateways and the Kalyanamandapam with carved pillars in the temple premises. The sculptures on the pillars were carved with distinctive features. The horse was the most common animal found in these pillars. Large mandapams contain one hundred pillars as well as one thousand pillars in some big temples. These mandapams were used for seating the deity on festival occasions. Also, many Amman shrines were added to the already existing temples during this period.

The most important temples of the Vijayanagar style were found in the Hampi ruins or the city of Vijayanagar. Vittalaswamy and Hazara Ramaswamy temples were the best examples of this style. The Varadharaja and Ekamparanatha temples at Kanchipuram stand as examples for the magnificence of the Vijayanagara style of temple architecture. The Raya Gopurams at Thiruvannamalai and Chidambaram speak the glorious epoch of Vijayanagar. They were continued by the Nayak rulers in the later period. The metal images of Krishna Deva Raya and his queens at Tirupati are examples for casting of metal images. Music and dancing were also patronized by the rulers of Vijayanagar.

Different languages such as Sanskrit, Telugu, Kannada and Tamil flourished in the regions. There was a great development in Sanskrit and Telugu literature. The peak of literary achievement was reached during the reign of Krishna Deva Raya. He himself was a scholar in Sanskrit and Telugu. His famous court poet Allasani Peddanna was distinguished in Telugu literature. Thus the cultural contributions of the Vijayanagar rulers were many-sided and remarkable.

### Bahmani Kingdom

The founder of the Bahmani kingdom was Alauddin Bahman Shah also known as Hasan Gangu in 1347. Its capital was Gulbarga. There were a total of fourteen Sultans ruling over this kingdom. Among them, Alauddin Bahman Shah, Muhammad Shah I and Firoz Shah were important. Ahmad Wali Shah shifted the capital from Gulbarga to Bidar. The power of the Bahmani kingdom reached its peak under the rule of Muhammad Shah III. It extended from the Arabian sea to the Bay of Bengal. On the west it extended from Goit to Bombay. On the east, it extended from Kakinada to the mouth of the river Krishna. The success of Muhammad Shah was due to the advice and services of his minister Mahmud Gawan.

### Mahmud Gawan

The Bahmani kingdom reached its peak under the guidance of Mahmud Gawan. He was a Persian merchant. He came to India at the age of forty two and joined the services of Bahmani kingdom. Slowly he became the chief minister due to his personal qualities. He remained loyal to the kingdom. He lived a simple life and was magnanimous. He was also a learned person. He possessed a great knowledge of mathematics. He made endowments to build a college at Bidar which was built in the Persian style of architecture. He was also a military genius. He waged successful wars against Vijayanagar, Orissa and the sea pirates on the Arabian sea. His conquests include Konkan, Goa and Krishna-Godavari delta. Thus he expanded the Bahmani Empire through his conquests.

His administrative reforms were also important. They were aimed to increase the control of Sultan over the nobles and provinces. Royal officers were appointed in each province for this purpose. Most of the forts were

under the control of these officers. Allowances were reduced to the nobles who shirked their responsibility. This was disliked by the nobles. So, the Deccani nobles organised a plot against Gawan. They induced the Sultan to punish him with death sentence. After the execution of **Ruins of Golkonda Fort** Gawan, the Bahmani kingdom began to decline. Muhammad Shah was succeeded by weak Sultans. During this period the provincial governors declared their independence. By the year 1526, the Bahmani kingdom had disintegrated into five independent sultanates. They were Ahmadnagar, Bijapur, Berar, Golkonda and Bidar and known as Deccan Sultanates.

## LESSON 20 THE MUGHAL EMPIRE

### Learning Objectives

*Students will acquire knowledge about*

1. Political History of the Mughal Empire.
2. Babur and his achievements.
3. Humayuns' difficulties and the Sur interregnum.
4. Akbar and his achievements - Religious policy.
5. Jahangir and Shah Jahan.
6. Aurangzeb and his religious policy.
7. Causes for the decline of the Mughal empire.

### Babur (1526-1530)

Babur was the founder of the Mughal Empire in India. His original name was Zahiruddin Muhammad. He was related to Timur from his father's side and to Chengiz Khan through his mother. Babur succeeded his father Umar Shaikh Mirza as the ruler of Farghana. But he was soon defeated by his distant relative and as a result lost his kingdom. He became a wanderer for sometime till he captured Kabul from one of his uncles. Then, Babur took interest in conquering India and launched four expeditions between 1519 and 1523.

### Military Conquests

On the eve of Babur's invasion of India, there were five prominent Muslim rulers - the Sultans of Delhi, Gujarat, Malwa, Bengal and the Deccan - and two prominent Hindu rulers - Rana Sangha of Mewar and the Vijayanagar Empire. Once again by the end of 1525, Babur started from Kabul to conquer India. He occupied Lahore easily by defeating its governor, Daulat Khan Lodi. Then he proceeded against Delhi where Ibrahim Lodi was the Sultan. On 21<sup>st</sup> April 1526 the first Battle of Panipat took place between Babur and Ibrahim Lodi, who was killed in the battle. Babur's success was due to his cavalry and artillery. Babur occupied Delhi and sent his son Humayun to seize Agra. Babur proclaimed himself as "Emperor of Hindustan".

His subsequent victories over Rana Sangha and the Afghans secured his position as the ruler of India. Rana Sangha of Mewar was a great Rajput warrior. He marched against Babur and in the Battle of Khanua (near Agra) held in 1527 Babur won a decisive victory over him. Babur assumed the title Ghazi.

In 1528, Babur captured Chanderi from another Rajput ruler Medini Rai. In the next year, Babur defeated the Afghans in the Battle of Gogra in Bihar. By these victories, Babur consolidated his power in India. Babur died at Agra in 1530 at the age of forty seven.

### Estimate of Babur

Babur was a great statesman and a man of solid achievements. He was also a great scholar in Arabic and Persian languages. Turki was his mother tongue. He wrote his memoirs, *Tuzuk-i-Baburi* in Turki language. It provides a vivid account of India. He frankly

confesses his own failures without suppressing any facts. He was also a naturalist and described the flora and fauna of India.

Humayun was the eldest son of Babur. Humayun means "fortune" but he remained the most unfortunate ruler of the Mughal Empire. Humayun had three brothers, Kamran, Askari and Hindal. Humayun divided the empire among his brothers but this proved to be a great blunder on his part. Kamran was given Kabul and Kandahar. Sambhal and Alwar were given to Askari and Hindal.

When Humayun was busy with fighting the Afghans in the east, he got the news that Bahadur Shah of Gujarat was advancing towards Delhi. Therefore, he hastily concluded a treaty with the Afghan leader Sher Khan (later Sher Shah) and proceeded towards Gujarat. Humayun captured Gujarat from Bahadur Shah and appointed Askari as its governor. But soon Bahadur Shah recovered Gujarat from Askari who fled from there. In the meantime Sher Khan became powerful in the east. Humayun marched against him and in the Battle of Chausa, held in 1539, Sher Khan destroyed the Mughal army and Humayun escaped from there. Humayun reached Agra to negotiate with his brothers. But as they were not cooperative, Humayun was forced to fight with Sher Khan alone in the Battle of Bilgram in 1540. This battle was also known as Battle of Kanauj. Humayun was thoroughly defeated by Sher Khan. After losing his kingdom, Humayun became an exile for the next fifteen years.

### Sur Interregnum (1540-1555)

The founder of the Sur dynasty was Sher Shah, whose original name was Farid. He was the son of Hasan Khan, a jagirdar of Sasaram in Bihar. Later, Farid served under the Afghan ruler of Bihar, who gave him the title Sher Khan for his bravery. We have already seen how he defeated Humayun at the Battle of Chausa and became the ruler of Delhi in 1540.

### Sher Shah Sur (1540-1545)

Sher Shah waged extensive wars with the Rajputs and expanded his empire. His conquests include Punjab, Malwa, Sind, Multan and Bundelkhand. His empire consisted of the whole of North India except Assam, Nepal, Kashmir and Gujarat.

### Sher Shah's Administration

Although his rule lasted for five years, he organized a brilliant administrative system. The central government consisted of several departments. The king was assisted by four important ministers:

1. *Diwan-i-Wizarat* - also called as *Wazir* - in charge of Revenue and Finance.
2. *Diwan-i-Ariz* - in charge of Army.
3. *Diwan-i-Rasalat* - Foreign Minister.
4. *Diwan-i-Insha* - Minister for Communications.

Sher Shah's empire was divided into forty seven *sarkars*. Chief *Shiqdar* (law and order) and Chief *Munsif* (judge) were the two officers in charge of the administration in each *sarkar*. Each *sarkar* was divided into several *parganas*. *Shiqdar* (military officer), *Amin* (land revenue), *Fotedar* (treasurer) *Karkuns* (accountants) were in charge of the administration of each *pargana*. There were also many administrative units called *iqtas*.

The land revenue administration was well organized under Sher Shah. Land survey was carefully done. All cultivable lands were classified into three classes - good, middle and bad. The state's share was one third of the average produce and it was paid in cash or crop. His



revenue reforms increased the revenue of the state. Sher Shah introduced new silver coins called "Dam" and they were in circulation till 1835.

Sher Shah had also improved the communications by laying four important highways. They were: 1. Sonargaon to Sind 2. Agra to Burhampur 3. Jodhpur to Chittor and 4. Lahore to Multan. Rest houses were built on the highways for the convenience of the travelers. Police was efficiently reorganized and crime was less during his regime.

The military administration was also efficiently reorganized and Sher Shah borrowed many ideas like the branding of horses from Alauddin Khalji.

### Estimate of Sher Shah

Sher Shah remained a pious Muslim and generally tolerant towards other religions. He employed Hindus in important offices. He was also a patron of art and architecture. He built a new city on the banks of the river Yamuna near Delhi. Now the old fort called Purana Qila and its mosque is alone surviving. He also built a Mausoleum at Sasaram, which is considered as one of the master pieces of Indian architecture. Sher Shah also patronized the learned men. Malik Muhammad Jayasi wrote the famous Hindi work Padmavat during his reign. After Sher Shah's death in 1545 his successors ruled till 1555 when Humayun reconquered India.

When Humayun left India in 1540, he married Hamida Banu Begum on his way to Sind. When they stayed in Amorkot, a Hindu kingdom ruled by Rana Prasad, Akbar was born in 1542. Humayun then proceeded to Iran and sought help from its ruler. He later defeated his brothers, Kamran and Askari. In the meantime the Sur dynasty in India was declining rapidly. In 1555, Humayun defeated the Afghans and recovered the Mughal throne. After six months, he died in 1556 due to his fall from the staircase of his library. Although Humayun was not a good General and warrior, he was kind and generous. He was also learned and a student of mathematics, astronomy and astrology. He also loved painting and wrote poetry in Persian language.

### Akbar (1556-1605)

Akbar was one of the greatest monarchs of India. He succeeded the throne after his father Humayun's death. But his position was dangerous because Delhi was seized by the Afghans. Their commander-in-Chief, Hemu, was in charge of it. In the second Battle of Panipat in 1556, Hemu was almost on the point of victory.

But an arrow pierced his eye and he became unconscious. His army fled and the fortune favoured Akbar. The Mughal victory was decisive.

During the first five years of Akbar's reign, Bairam Khan acted as his regent. He consolidated the Mughal Empire. After five years he was removed by Akbar due to court intrigues and sent to Mecca. But on his way Bairam was killed by an Afghan.

Akbar's military conquests were extensive. He conquered northern India from Agra to Gujarat and then from Agra to Bengal. He strengthened the northwest frontier. Later, he went to the Deccan.

### Relations with Rajputs

The Rajput policy of Akbar was notable. He married the Rajput princess, the daughter of Raja Bharamal. It was a turning point in the history of Mughals. Rajputs served the Mughals for four generations. Many of them rose to the positions of military generals. Raja Bhagawan Das and Raja Man Singh were given senior positions in the

administration by Akbar. One by one, all Rajput states submitted to Akbar.

But the Ranas of Mewar continued to defy despite several defeats. In the Battle of Haldighati, Rana Pratap Singh was severely defeated by the Mughal army led by Man Singh in 1576. Following the defeat of Mewar, most of the leading Rajput rulers had accepted Akbar's suzerainty.

Akbar's Rajput policy was combined with a broad religious toleration. He abolished the pilgrim tax and later the jiziya. The Rajput policy of Akbar proved to be beneficial to the Mughal state as well as to the Rajputs. The alliance secured to the Mughals the services of the bravest warriors. On the other hand it ensured peace in Rajasthan and a number of Rajputs who joined the Mughal service rose to important positions.

### Religious Policy

Akbar rose to fame in the pages of history due to his religious policy. Various factors were responsible for his religious ideas. The most important among them were his early contacts with the sufi saints, the teachings of his tutor Abdul Latif, his marriage with Rajput women, his association with intellectual giants like Shaikh Mubarak and his two illustrious sons - Abul Faizi and Abul Fazl - and his ambition to establish an empire in Hindustan.

In the beginning of his life, Akbar was a pious Muslim. Soon after marrying Jodh Bai of Amber, he abolished the pilgrim tax and in 1562, he abolished jiziya. He allowed his Hindu wives to worship their own gods. Later, he became a skeptical Muslim. In 1575, he ordered for the construction of Ibadat Khana (House of worship) at his new capital Fatepur Sikri. Akbar invited learned scholars from all religions like Hinduism, Jainism, Christianity and Zoroastrianism. He disliked the interference of the Muslim Ulemas in political matters. In 1579, he issued the "Infallibility Decree" by which he asserted his religious powers.

In 1582, he promulgated a new religion called *Din Ilahi* or Divine Faith. It believes in one God. It contained good points of all religions. Its basis was rational. It upholds no dogma. It was aimed at bridging the gulf that separated different religions. However, his new faith proved to be a failure. It fizzled out after his death. Even during his life time, it had only fifteen followers including Birbal. Akbar did not compel anyone to his new faith.

### Land Revenue Administration

Akbar made some experiments in the land revenue administration with the help of Raja Todar Mal. The land revenue system of Akbar was called *Zabti* or *Bandobast* system. It was further improved by Raja Todar Mal. It was known as *Dahsala* System which was completed in 1580. By this system, Todar Mal introduced a uniform system of land measurement. The revenue was fixed on the average yield of land assessed on the basis of past ten years. The land was also divided into four categories - *Polaj* (cultivated every year), *Parauti* (once in two years), *Chachar* (once in three or four years) and *Banjar* (once in five or more years). Payment of revenue was made generally in cash.

### Mansabdari System

Akbar introduced the Mansabdari system in his administration. Under this system every officer was assigned a rank (mansab). The lowest rank was 10 and the highest was 5000 for the nobles. Princes of royal blood received even higher ranks. The ranks were divided into two - *zat* and *sawar*. *Zat* means personal

and it fixed the personal status of a person. *Sawar* rank indicated the number of cavalymen of a person who was required to maintain. Every *sawar* had to maintain at least two horses. The mansab rank was not hereditary. All appointments and promotions as well as dismissals were directly made by the emperor.

### **Jahangir (1605-1627)**

When Akbar died, Prince Salim succeeded with the title Jahangir (Conqueror of World) in 1605. Jahangir's rule witnessed a spate of rebellions. His son Khusrav revolted but was defeated and imprisoned. One of his supporters, Guru Arjun, the fifth Sikh Guru, was beheaded.

### **NurJahan**

In 1611, Jahangir married Mehrunnisa who was known as Nur Jahan (Light of World). Her father Itimaduddaula was a respectable person. He was given the post of chief diwan. Other members of her family also benefited from this alliance. Nur Jahan's elder brother Asaf Khan was appointed as Khan-i-Saman, a post reserved for the nobles. In 1612, Asaf Khan's daughter, Arjumand Banu Begum (later known as Mumtaz), married Jahangir's third son, prince Khurram (later Shah Jahan).

It was believed by some historians that Nur Jahan formed a group of "junta" and this led to two factions in the Mughal court.

This drove Shah Jahan into rebellion against his father in 1622, since he felt that Jahangir was completely under Nur Jahan's influence. However, this view is not accepted by some other historians. Till Jahangir became weak due to ill health, he only took important political decisions. It is revealed from his autobiography.

However, it is clear that Nur Jahan dominated the royal household and set new fashions based on Persian traditions. She encouraged Persian art and culture in the court. She was a constant companion of Jahangir and even joined him in his hunting.

The rise of Shah Jahan was due to his personal ambitions. He rose in revolt against his father who ordered him to go to Kandahar. This rebellion distracted the activities of the empire for four years. After Jahangir's death in 1627, Shah Jahan reached Agra with the support of the nobles and the army. Nur Jahan was given a pension and lived a retired life till her death eighteen years later.

### **Shah Jahan (1627-1658)**

Shah Jahan launched a prolonged campaign in the northwest frontier to recover Kandahar and other ancestral lands. The Mughal army lost more than five thousand lives during the successive invasions between 1639 and 1647. Then Shah Jahan realized the futility of his ambition and stopped fighting.

His Deccan policy was more successful.

He defeated the forces of Ahmadnagar and annexed it.

Both Bijapur and Golkonda signed a treaty with the emperor. Shah Jahan carved four Mughal provinces in the Deccan - Khandesh, Berar, Telungana and Daulatabad. They were put under the control of his son Aurangzeb.

### **War of Succession**

The last years of Shah Jahan's reign were clouded by a bitter war of succession among his four sons - Dara Shikoh (crown prince), Shuja (governor of Bengal), Aurangzeb (governor of Deccan) and Murad Baksh (governor of Malwa and Gujarat). Towards the end of 1657, Shah Jahan fell ill at Delhi for some time but later

recovered. But the princes started fighting for the Mughal throne.

Aurangzeb emerged victorious in this struggle. He entered the Agra fort after defeating Dara. He forced Shah Jahan to surrender. Shah Jahan was confined to the female apartments in the Agra fort and strictly put under vigil. But he was not ill-treated. Shah Jahan lived for eight long years lovingly nursed by his daughter Jahanara. He died in 1666 and buried beside his wife's grave in the Taj Mahal.

### **Aurangzeb (1658-1707)**

Aurangzeb was one of the ablest of the Mughal kings. He assumed the title Alamgir, World Conqueror. His military campaigns in his first ten years of reign were a great success. He suppressed the minor revolts. But he faced serious difficulties in the latter part of his reign. The Jats and Satnamis and also the Sikhs revolted against him. These revolts were induced by his harsh religious policy.

### **Deccan Policy**

The Deccan policy of the Mughals started from the reign of Akbar, who conquered Khandesh and Berar. Jahangir fought against Malik Amber of Ahmadnagar. During the Shah Jahan's reign, Aurangzeb, as governor of Deccan, followed an aggressive Deccan policy. When he became the Mughal emperor, for the first twenty five years, he concentrated on the northwest frontier. At that time, the Maratha ruler, Sivaji carved out an independent Maratha kingdom in the territories of north and south Konkan.

To contain the spread of the Marathas, Aurangzeb decided to invade Bijapur and Golkonda. He defeated Sikandar Shah of Bijapur and annexed his kingdom. Then, he proceeded against Golkonda and eliminated the Kutb Shahi dynasty. It was also annexed by him. In fact, the destruction of the Deccan kingdoms was a political blunder on the part of Aurangzeb. The barrier between the Mughals and the Marathas was removed and there ensued a direct confrontation between them. Also, his Deccan campaigns exhausted the Mughal treasury. According to J.N. Sarkar, the Deccan ulcer ruined Aurangzeb.

### **Religious Policy**

Aurangzeb was a staunch and orthodox Muslim in his personal life. His ideal was to transform India into an Islamic state. He created a separate department to enforce moral codes under a high-powered officer called Muhtasib. Drinking was prohibited. Cultivation and use of bhang and other drugs were banned. Aurangzeb forbade music in the Mughal court. He discontinued the practice of Jarokhadarshan. He also discontinued the celebration of Dasarah and royal astronomers and astrologers were also dismissed from service.

Initially Aurangzeb banned the construction of new Hindu temples and repair of old temples. Then he began a policy of destroying Hindu temples. The celebrated temples at Mathura and Benares were reduced to ruins. In 1679, he reimposed jiziya and pilgrim tax. He was also not tolerant of other Muslim sects. The celebration of Muharram was stopped. His invasions against the Deccan sultanates were partly due to his hatred of the Shia faith.

He was also against the Sikhs and he executed the ninth Sikh Guru Tej Bahadur. This had resulted in the transformation of Sikhs into a warring community. His religious policy was responsible for turning the Rajputs, the Marathas and Sikhs into the enemies of

Mughal empire. It had also resulted in the rebellions of the Jats of Mathura and the Satnamis of Mewar. Therefore, Aurangzeb was held responsible for the decline of the Mughal empire.

### Personality and Character of Aurangzeb

In his private life, Aurangzeb was industrious and disciplined. He was very simple in food and dress. He earned money for his personal expenses by copying Quran and selling those copies. He did not consume wine. He was learned and proficient in Arabic and Persian languages. He was a lover of books. He was devoted to his religion and conducted prayers five times a day. He strictly observed the Ramzan fasting.

In the political field, Aurangzeb committed serious mistakes. He misunderstood the true nature of the Maratha movement and antagonized them. Also, he failed to solve the Maratha problem and left an open sore. His policy towards Shia Deccan Sultanates also proved to be a wrong policy.

His religious policy was also not successful. Aurangzeb was an orthodox Sunni Muslim. But his move to apply his religious thought rigidly in a non-Muslim society was a failure. His antagonistic policies towards non-Muslims did not help him to rally the Muslims to his side. On the other hand it had strengthened political enemies of the Mughal Empire.

### Causes for the Downfall of the Mughals

The Mughal Empire declined rapidly after the death of Aurangzeb. The Mughal court became the scene of factions among the nobles. The weakness of the empire was exposed when Nadir Shah imprisoned the Mughal Emperor and looted Delhi in 1739. The causes for the downfall of the Mughal Empire were varied. To some extent, the religious and Deccan policies of Aurangzeb contributed to its decline. The weak successors and demoralization of the Mughal army also paved the way for it. The vastness of the empire became unwieldy. The financial difficulties due to continuous wars led to the decline. The neglect of the sea power by the Mughals was felt when the Europeans began to settle in India. Further, the invasions of Nadir Shah and Ahmad Shah Abdali weakened the Mughal state. Thus the decline and downfall of the Mughal Empire was due to the combination of political, social and economic factors.

## Chapter 6 India Under The Mughals

### Learning Objectives

*Students will acquire knowledge about 1. The Causes for the Vellore Mutiny.*

1. Economic and Social life under the Mughal Empire.
2. Mughal nobility and their way of life.
3. Agriculture and Trade.
4. Cultural Development - Art and Architecture.
5. Mughal paintings and Literature.

### Economic and Social Life

The Mughal period saw important social and economic developments. During this period, many European travelers and traders came to India and their accounts contain a mine of information about the socio-economic conditions of India. In general, they described the wealth and prosperity of India and also the luxurious life of the aristocratic classes. On the other side, they also mentioned the poverty and sufferings of the ordinary people such as peasants and artisans.

### Mughal Nobility

The nobles of the Mughal period formed a privileged class. Most of them were foreigners such as Turks and Afghans. But there was tussle between them throughout this period. However, many of them settled down in India and made it their permanent home. They readily assimilated themselves into the Indian society and culture. At the same time they retained some of their personal traits. From the time of Akbar, the Hindus, particularly the Rajputs were included in the nobility. For example, mention may be made about Raja Man Singh, Raja Birbal and Raja Todar Mal. Later, the Marathas also joined the Mughal service and rose to the position of nobles.

The Mughal nobles were paid high salaries but their expenses were also very high. Each noble maintained a large number of servants, horses, elephants, etc. The nobles tried follow the luxurious life style of the Mughal emperors. They wore fine clothes and ate imported fruits. Costly jewels were worn by men and women. They also made costly presents to the emperors.

### Rural Masses

While the wealthy people wore silk and cotton clothes, the poor people wore the minimum cloths. They suffer from insufficient clothing even during the winter. Nikitin observed that the people of Deccan were bare-footed. It might be due to high cost of leather. Rice, millets and pulses were the staple food of the common people. Fish was popular on the coastal region. While ghee and oil were cheaper, salt and sugar were more expensive. As plenty of cattle were kept by the rural people, milk and milk products were available in plenty.

### Agriculture

An estimate claims that the population of India at the beginning of the seventeenth century was about 125 million. As plenty of land was available for cultivation, agriculture was prosperous. A large variety of crops such as wheat, rice, gram, barley, pulses were cultivated. Commercial crops such as cotton, indigo, sugarcane and oil-seeds were also cultivated. During the seventeenth century two new crops, namely, tobacco and maize were added. Potato and red chillies came later in the eighteenth century. But, no new agricultural technique was introduced during this period. However, India was able to export food items like rice and sugar to the neighbouring countries.

### Growth of Trade

The Indian trading classes were large in numbers and spread throughout the country. They were well organized and highly professional. Seth, bohra traders specialized in long distance trade while local traders were called banik. Another class of traders was known as banjaras, who specialized in carrying bulk goods. The banjaras used to move to long distances with their goods on the back of oxen. Bulk goods were also taken through rivers on boats. The trading community did not belong to one caste or religion. The Gujarathi merchants included the Hindus, Jains and Muslims. In Rajasthan, Oswals, Maheshwaris and Agarwals came to be called the Marwaris. Multanis, Khattris and Afghanis conducted trade with central Asia. In south India, the Chettis on the Coramandal coast and the Muslim merchants of Malabar were the most important trading communities. Bengal exported sugar, rice as well as delicate muslin and silk. The Coramandal coast became a centre of textile production. Gujarat was an entry point of foreign goods. From there, fine textiles and silk were taken to north India. Indigo and food grains were exported from north India through Gujarat. It was also the distribution



centre for the luxury products of Kashmir such as shawls and carpets. The major imports into India were certain metals such as tin and copper, war horses and luxury items such as ivory. The balance of trade was maintained by the import of gold and silver. The growth of foreign trade had resulted in the increased import of gold and silver in the seventeenth century. The Dutch and English traders, who came to Gujarat during the seventeenth century, found that Indian traders were alert and brisk.

## Cultural Development under the Mughals

The Mughal period witnessed a significant and widespread development in cultural activity. It was manifest in the sphere of art and architecture, painting, music and literature. In this cultural development, Indian traditions were blended with Turko-Iranian culture which was brought into India by the Mughals.

### Art and Architecture

The architecture of the Mughals includes the magnificent forts, palaces, public buildings, mosques and mausoleums. The Mughals were fond of laying gardens with running water. Some of the Mughal gardens such as the Nishat Bagh in Kashmir, the Shalimar Bagh at Lahore and the Pinjore garden in the Punjab have survived even today. During the reign of

#### Purana Qila

Sher Shah, the mausoleum at Sasaram in Bihar and the Purana Qila near Delhi were built. These two monuments are considered as the architectural marvels of medieval India.

#### DIWAN-I-KHAS

Large scale construction of buildings started with the advent of Akbar. He built many forts and the most famous one was the Agra Fort. It was built in red sandstone. His other forts are at Lahore and Allahabad. The climax of fort-building reached its climax during the reign of Shah Jahan. The famous Red Fort at Delhi with its Rang Mahal, *Diwan-i-Am* and *Diwan-i-Khas* was his creation.

Akbar also built a palace-cum-fort complex at Fatepur Sikri (City of Victory), 36 kilometres from Agra. Many buildings in Gujarathi and Bengali styles are found in this complex. Gujarathi style buildings were probably built for his Rajput wives. The most magnificent building in it is the Jama Masjid and the gateway to it called Buland Darwaza or the Lofty Gate. The height of the gateway is 176 feet. It was built to commemorate Akbar's victory over Gujarat. Other important buildings at Fatepur Sikri are Jodh Bai's palace and Panch Mahal with five storeys. During Akbar's reign, the Humayun's tomb was built at Delhi and it had a massive dome of marble. It may be considered the precursor of the Taj Mahal. Akbar's tomb at Sikandara near Agra was completed by Jahangir. Nur Jahan built the tomb of Itimaddaulah at Agra. It was constructed wholly of white marble with floral designs made of semi-precious stones on the walls. This type of decoration was called *pietra dura*. This method became more popular during the reign of Shah Jahan. The *pietra dura* method was used on a large scale in the Taj Mahal by Shah Jahan. Taj Mahal is considered a jewel of the builder's art. It contains all the architectural forms developed by the Mughals. The chief glory of the Taj is the massive dome and the four slender minarets. The decorations are kept to the minimum.

Mosque building had reached its peak during Shah Jahan's reign. The Moti Masjid at Agra was built entirely

in white marble. The Jama Masjid at Delhi was built in red stone.

The Mughal architectural traditions continued in the eighteenth and early nineteenth century. Their influence in the provincial kingdoms is clearly visible. Many features of Mughal tradition can be seen in the Golden Temple at Amritsar.

### Paintings and Music

The contribution of Mughals to the art of painting was remarkable. The foundation for the Mughal painting was laid by Humayun when he was staying in Persia. He brought with him two painters - Mir Sayyid Ali and Abdal Samad to India. These two painters became famous during Akbar's reign. Akbar commissioned the illustrations of several literary and religious texts. He invited a large number of painters from different parts of the country to his court. Both Hindus and Muslims joined in this work. Baswan, Miskina and Daswant attained great positions as Akbar's court artists. Illustrations of Persian versions of Mahabharata and Ramayana were produced in miniature form. Many other Indian fables became the miniature paintings in the Art Studio established by Akbar. Historical works such as Akbar Nama also remained the main themes of Mughal paintings. The most important work is Hamznama, which consisted 1200 paintings. Indian colours such as peacock blue, Indian red began to be used.

Mughal paintings reached its climax during the reign of Jahangir. He employed a number of painters like Abul Hasan, Bishan Das, Madhu, Anant, Manohar, Govardhan and Ustad Mansur. Apart from painting the scenes of hunting, battles and royal courts, progress was made in portrait painting and paintings of animals. Many albums containing paintings and calligraphy were produced during the Mughal period. Later, the influence of European painting could be seen.

Music had also developed under the Mughals. Akbar patronized Tansen of Gwalior. Tansen composed many ragas. Jahangir and Shah Jahan were also fond of music.

### Language and Literature

Persian language became widespread in the Mughal Empire by the time of Akbar's reign. Abul Fazl was a great scholar and historian of his period. He set a style of prose writing and it was followed by many generations. Many historical works were written during this period. They include *Ain-i-Akbari* and *Akbar Nama* authored by Abul Fazl. The leading poet of that period was his brother Abul Faizi. The translation of Mahabharata into the Persian language was done under his supervision. Utbi and Naziri were the two other leading Persian poets.

Jahangir's autobiography, *Tuzuk-i-Jahangiri* was famous for its style. He also patronized many scholars like Ghiyas Beg, Naqib Khan and Niamatullah. Shah Jahan also patronized many writers and historians like Abdul Hamid Lahori, author of Padshah Nama and Inayat Khan who wrote Shah Jahan Nama. His son Dara Shikoh translated the Bhagavat Gita and Upanishads into the Persian language. Many historical works were written during the reign of Aurangzeb. Famous dictionaries of the Persian language were also compiled during the Mughal period.

## Chapter 7 The Marathas

### Learning Objectives

Students will acquire knowledge about

1. The rise of the Marathas.
2. Life and achievements of Shivaji.
3. Shivaji's administration.
4. Rise of the Peshwas.

### The Rise of the Marathas

Various factors contributed to the rise of Marathas in the sixteenth and seventeenth centuries. The physical environment of the Maratha country shaped certain peculiar qualities among the Marathas. The mountainous region and dense forests made them brave soldiers and adopt guerilla tactics. They built a number of forts on the mountains. The spread of the Bhakti movement in Maharashtra inculcated a spirit of religious unity among them. The spiritual leaders like Tukaram, Ramdas, Vaman Pandit and Eknath fostered social unity. The political unity was conferred by Shivaji. The Marathas held important positions in the administrative and military systems of Deccan Sultanates of Bijapur and Ahmadnagar. There were a number of influential Maratha families such as the Mores and Nimbalkers. But the credit of establishing a powerful Maratha state goes to Shahji Bhonsle and his son Shivaji.

### Shivaji (1627-1680): His Life and Conquests

Shivaji was born at Shivner in 1627. His father was Shahji Bhonsle and mother Jija Bai. He inherited the jagir of Poona from his father in 1637. After the death of his guardian, Dadaji Kondadev in 1647, Shivaji assumed full charge of his jagir. Even before that he conquered Raigarh, Kondana and Torna from the ruler of Bijapur. He captured Javli from a Maratha chief, Chanda Rao More. This made him the master of Mavala region. In 1657, he attacked the Bijapur kingdom and captured a number of hill forts in the Konkan region. The Sultan of Bijapur sent Afzal Khan against Shivaji. But Afzal Khan was murdered by Shivaji in 1659 in a daring manner. Shivaji's military conquests made him a legendary figure in the Maratha region. Many came forward to join his army. The Mughal emperor Aurangzeb was anxiously watching the rise of Maratha power under Shivaji. He sent the Mughal governor of the Deccan, Shaista Khan against Shivaji. Shivaji suffered a defeat at the hands of the Mughal forces and lost Poona. But Shivaji once again made a bold attack on Shaista Khan's military camp at Poona in 1663, killed his son and wounded Khan. This daring attack affected the prestige of Khan and he was recalled by Aurangzeb. In 1664, Shivaji attacked Surat, the chief port of the Mughals and plundered it. This time Aurangzeb sent Raja Jai Singh of Amber to fight against Shivaji. He made elaborate preparations and succeeded in besieging the Purander fort where Shivaji lodged his family and treasure. Shivaji opened negotiations with Jai Singh and the Treaty of Purander was signed in 1665. According to the treaty, Shivaji had to surrender 23 forts to the Mughals out of 35 forts held by him. The remaining 12 forts were to be left to Shivaji on condition of service and loyalty to Mughal empire. On the other hand, the Mughals recognized the right of Shivaji to hold certain parts of the Bijapur kingdom. As Shivaji asked to exempt him from personal service to the Mughals, his minor son Shambaji was granted a mansab of 5000.

Shivaji visited Agra in 1666 but he was imprisoned there. But, he managed to escape from prison and made military preparations for another four years. Then he renewed his wars against the Mughals. Surat was plundered by him for the second time in 1670. He also

captured all his lost territories by his conquests. In 1674 Shivaji crowned himself at Raigarh and assumed the title Chatrapathi. Then he led an expedition into the Carnatic region and captured Ginjee and Vellore. After his return from this expedition, Shivaji died in 1680.

### Shivaji's Administration

Shivaji was also a great administrator. He laid the foundations of a sound system of administration. The king was the pivot of the government. He was assisted by a council of ministers called Ashtapradhan. However, each minister was directly responsible to Shivaji.

1. Peshwa Finance and general administration. Later he became the prime minister.
2. *Sar-i-Naubat* or Senapati Military commander, a honorary post.
3. Amatya - Accountant General.
4. Waqenavis - Intelligence, posts and household affairs.
5. Sachiv - Correspondence.
6. Sumanta - Master of ceremonies.
7. Nyayadish - Justice.
8. Panditarao - Charities and religious administration.

Most of the administrative reforms of Shivaji were based on the practices of the Deccan sultanates. For example, Peshwa was the Persian title.

The revenue system of Shivaji was based on that of Malik Amber of Ahmadnagar. Lands were measured by using the measuring rod called *kathi*. Lands were also classified into three categories - paddy fields, garden lands and hilly tracks. He reduced the powers of the existing *deshmuks* and *kulkarnis*. He appointed his own revenue officials called *karkuns*.

Chauth and sardeshmukhi were the taxes collected not in the Maratha kingdom but in the neighbouring territories of the Mughal empire or Deccan sultanates. Chauth was one fourth of the land revenue paid to the Marathas in order to avoid the Maratha raids. Sardeshmukhi was an additional levy of ten percent on those lands which the Marathas claimed hereditary rights.

Shivaji was a man of military genius and his army was well organized. The regular army consisted of about 30000 to 40000 cavalry supervised by *havildars*. They were given fixed salaries. There were two divisions in the Maratha cavalry - 1. *bargirs*, equipped and paid by the state; and 2. *silahdars*, maintained by the nobles. In the infantry, the Mavli foot soldiers played an important role. Shivaji also maintained a navy. The forts played an important role in the military operations of the Marathas. By the end of his reign, Shivaji had about 240 forts. Each fort was put under the charge of three officers of equal rank as a precaution against treachery.

Shivaji was really a constructive genius and nation-builder. His rise from jagirdar to Chatrapathi was spectacular. He unified the Marathas and remained a great enemy of the Mughal empire. He was a daring soldier and a brilliant administrator.

### Successors of Shivaji

There ensued a war of succession after the death of Shivaji between his sons, Shambaji and Rajaram. Shambaji emerged victorious but later he was captured and executed by the Mughals. Rajaram succeeded the throne but the Mughals made him to flee to the Ginjee fort. He died at Satara. He was succeeded by his minor son Shivaji II with his mother Tara Bai as regent. The next ruler was Shahu in whose reign the Peshwas rose to power.

### The Peshwas (1713-1818)

### Balaji Viswanath (1713-1720)

Balaji Viswanath began his career as a small revenue official and became Peshwa in 1713. As Peshwa, he made his position the most important and powerful as well as hereditary. He played a crucial role in the civil war and finally made Shahu as the Maratha ruler. He sought the support of all Maratha leaders for Shahu. In 1719, Balaji Viswanath got certain rights from the then Mughal emperor, Farukh Siyar. First, the Mughal emperor recognized Shahu as the Maratha king. Second, he allowed Shahu to collect Chauth and Sardeshmukhi from the six Mughal provinces of the Deccan including the Carnatic and Mysore.

### Baji Rao I (1720-1740)

Baji Rao was the eldest son of Balaji Viswanath. He succeeded his father as Peshwa at the young age of twenty. The Maratha power reached its zenith under him. He initiated the system of confederacy among the Maratha chiefs. Under this system, each Maratha chief was assigned a territory which could be administered autonomously. As a result, many Maratha families became prominent and established their authority in different parts of India. They were the Gaekwad at Baroda, the Bhonsle at Nagpur, the Holkars at Indore, the Scindias at Gwalior, and the Peshwas at Poona.

### Balaji Baji Rao (1740-1761)

Balaji Baji Rao succeeded his father as Peshwa at the young age of nineteen. The Maratha king Shahu died in 1749 without issue. His nominated successor Ramraja was imprisoned by the Peshwa Balaji Baji Rao at Satara. The full control of the Maratha kingdom came under the Peshwa.

Peshwa entered into an agreement with the Mughal Emperor in 1752. According to it the Peshwa gave assurance to the Mughal Emperor that he would protect the Mughal Empire from internal and external enemies for which the Chauth of the northwest provinces and the total revenue of the Agra and Ajmer provinces would be collected by the Marathas.

Thus when Ahmad Shah Abdali invaded India, it became the responsibility of the Marathas to protect India. The Marathas fought very bravely against Ahmad Shah Abdali in the Third Battle of Panipat in 1761. But they got defeated. Many Maratha leaders and thousands of soldiers died in this battle. Balaji Baji Rao also died on hearing the sad end of this battle. Also, this battle gave a death blow to the Maratha power. Thereafter, the Maratha confederacy weakened due to internal conflicts among the Maratha chiefs.

## Chapter 8 Learning Objectives

*Students will acquire knowledge about*

1. The coming of the Portuguese to India.
2. Establishment of the Dutch, French, English and Danish Trading centres in India.
3. The Anglo-French Rivalry in the Carnatic region.
4. Rise of British power in Bengal.

### THE COMING OF EUROPEANS

The commercial contacts between India and Europe were very old via the land route either through the Oxus valley or Syria or Egypt. But, the new sea route via the Cape of Good Hope was discovered by Vasco da Gama in 1498. Thereafter, many trading companies came to India and established their trading centres. They entered India as traders at the outset but by the passage

of time indulged in the politics of India and finally established their colonies. The commercial rivalry among the European powers led to political rivalry. Ultimately, the British succeeded in establishing their rule in India.

### The Portuguese

The Portuguese traveler Vasco da Gama reached the port of Calicut on 17 May 1498 and he was warmly received by Zamorin, the ruler of Calicut. He returned to Portugal in the next year. Pedro Alvarez Cabral arrived in 1500 and Vasco da Gama also made a second trip in 1502. They established trading stations at Calicut, Cannanore and Cochin.

The first governor of the Portuguese in India was Francis de Almeida. Later in 1509 Albuquerque was made the governor of the Portuguese territories in India. In 1510, he captured Goa from the ruler of Bijapur. Thereafter, Goa became the capital of the Portuguese settlements in India. Albuquerque captured Malacca and Ceylon. He also built a fort at Calicut. He encouraged his countrymen to marry Indian women. Albuquerque died in 1515 leaving the Portuguese as the strongest naval power in India.

The successors of Albuquerque established Portuguese settlements at Daman, Salsette and Bombay on the west coast and at San Thome near Madras and Hugli in Bengal on the east coast. However, the Portuguese power declined in India by the end of the sixteenth century. They lost all their possessions in India except Goa, Diu and Daman in the next century.

### The Dutch

The Dutch East India Company was established in 1602. The merchants of this company came to India and established their settlements at Masulipattinam, Pulicat, Surat, Karaikal, Nagapattinam, Chinsura and Kasimbazar. In the seventeenth century they won over the Portuguese and emerged the most dominant power in European trade in the East. Pulicat was their main centre in India and later it was replaced by Nagapattinam. In the middle of the seventeenth century the English began to emerge as a big colonial power. The Anglo-Dutch rivalry lasted for about seven decades during which period the Dutch lost their settlements to the British one by one.

The English East India Company was established in 1600 and the Charter was issued by Queen Elizabeth of England. Captain Hawkins arrived at the royal court of Jahangir in 1609 to seek permission to establish English trading centre at Surat. But it was refused by the Mughal Emperor due to Portuguese pressure. Later in 1612, Jahangir issued a farman (permission letter) to the English and they established a trading factory at Surat in 1613.

Sir Thomas Roe came to India as ambassador of James I, the king of England to the Mughal court in 1615. He obtained permission from Jahangir to establish English trading factories in different parts of India.

The English established their factories at Agra, Ahmadabad, Baroda and Broach by 1619. The English East India Company acquired Bombay from Charles II, the then king of England. In 1639, Francis Day founded the city of Madras where the Fort St. George was built. In 1690, an English factory was established at a place called Sutanuti by Job Charnock. Later it developed into the city of Calcutta where Fort William was built. Later, Calcutta became the capital of British India. Thus Bombay, Madras, Calcutta became three presidency towns of the English settlements in India.



## The French

The French East India Company was formed in 1664 by Colbert, a Minister under Louis XIV. The first French factory in India was established at Surat by Francis Caron. Later, Maracara set up a factory at Masulipattinam. Francois Martin founded Pondicherry in 1673. Other French factories in India were Chandranagore, Mahe and Karaikal. Francois Martin was the first governor of Pondicherry, the headquarters of the French possessions in India. Denmark also established trade settlements in India. Their settlement at Tranquebar was founded in 1620. Another important Danish settlement in India was Serampore in Bengal. Serampore was their headquarters in India. They failed to strengthen themselves in India and they sold all their settlement in India to the British in 1845.

## Anglo-French Rivalry

In the beginning of the eighteenth century, the English and the French were competing with each other to establish their supremacy in India. Both of them used the political turmoil prevalent in India as a result of the decline of the Mughal Empire in their favour and indulged in internal politics. The Anglo-French rivalry in India was manifest in the Carnatic region and in Bengal.

## The Carnatic Wars

The downfall of the Mughal Empire led to the independence of Deccan under Nizam-ul-Mulk. The Carnatic region also formed part of the Nizam's dominion. The ruler of the Carnatic accepted the suzerainty of the Nizam. In 1740, the Austrian War of Succession broke out in Europe. In that war England and France were in the opposite camps. They came into conflict in India also.

The French governor of Pondicherry, Dupleix opened attack on the English in 1746 and thus began the First Carnatic War (1746-1748). The English sought help from the Nawab of Carnatic, Anwar Uddin. But the French concluded a treaty with his rival Chanda Sahib. The English army crushed a defeat on the French in the Battle of Adyar, near Madras. In the meantime, the Treaty of

Aix-la-Chappelle was concluded in 1748 to end the Austrian Succession War. Thus the First Carnatic War came to an end.

But the English and French continued to take opposite sides in the internal politics of India. This had resulted in the Second Carnatic War (1749-1754). Dupleix supported the cause of Muzafar Jang, who wanted to become the Nizam of Hyderabad and Chanda Sahib, an aspirant for the throne of Arcot. The troops of these three defeated Anwar Uddin, who was with the British in the First Carnatic War, and killed him in the Battle of Ambur in 1749. After this victory, Muzafar Jung became the Nizam and Chanda Sahib the Nawab of Arcot.

Muhammad Ali, son of Anwar Uddin escaped to Tiruchirappalli. The English sent troops in support of him. In the meantime, the British commander Robert Clive captured Arcot. He also inflicted a severe defeat on the French at Kaveripakkam. Chanda Sahib was captured and beheaded in Tanjore. Meanwhile Dupleix was replaced by Godeheu as the French governor. The war came to an end by the Treaty of Pondicherry in 1754.

The outbreak of the Seven Years War (1756-1763) in Europe led to the Third Carnatic War (1758-1763). Count de Lally was the commander of the French troops. The British General Sir Eyre Coote defeated him at Wandiwash in 1760. In the next year, Pondicherry was captured and destroyed by the British troops. The Seven Years War came to an end by the Treaty of Paris in 1763. The Third Carnatic War also ended. The French agreed to confine its activities in Pondicherry, Karaikkal, Mahe and Yenam. Thus the Anglo-French rivalry came to a close with British success and French failure.

The causes for the French failure can be summed up as follows:

1. Commercial and naval superiority of the English.
2. Lack of support from the French government.
3. French had support only in the Deccan but the English had a strong base in Bengal.
4. English had three important ports - Calcutta, Bombay and Madras but French had only Pondicherry.
5. Difference of opinion between the French Generals.
6. England's victory in the European wars decided the destiny of the French in India.

## Establishment of British Power in Bengal

Bengal remained one of the fertile and wealthy regions of India. The English ascendancy in Bengal proved to be the basis for the expansion of English rule in India. The conflict between the Nawab of Bengal, Siraj-ud-Daula and the English led to the Battle of Plassey held on 23 June 1757.

Robert Clive, the Commander of the British troops emerged victorious by defeating the Nawab's army. The easy English victory was due to the treachery of Mir Jabar, the Commander of Nawab's army. However, the victory of the British in the Battle of Plassey marked the foundation of the British rule in India.

In 1764, the English once again defeated the combined forces of the Nawab of Oudh, the Mughal Emperor and the Nawab of Bengal in the Battle of Buxar. The English military superiority was decisively established. In 1765, Robert Clive was appointed as the Governor of Bengal. In the same year, the Treaty of Allahabad was concluded by which the Mughal Emperor granted the Diwani rights to the English East India Company. Thus the British power in India was thoroughly established.

# NCERT Class 12

## Modern India (Old NCERT)

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 Warren Hastings (1772-1785)

##### Learning Objectives

*Students will acquire knowledge about*

1. The growth of East India Company's Rule in India.
2. Reforms introduced by the first Governor-General, Warren Hastings.
3. Provisions, merits and defects of the Regulating Act of 1773.
4. Expansion policy of Warren Hastings - the First Maratha War and the Second Mysore War.
5. Pitt's India Act of 1784.
6. Impeachment of Warren Hastings.

##### The English East India Company

The English East India Company was established on 31 December 1600 as per the Royal Charter issued by the Queen of England, Elizabeth I. The Company had sent Captain Hawkins to the court of the Mughal Emperor, Jahangir in 1608 to secure permission to establish a "factory" (store house of goods) at Surat. It was turned down initially. However, in 1613, Jahangir issued the *firman* permitting the East India Company to establish its first trading post at Surat. Subsequently, Sir Thomas Roe obtained more trading rights and privileges for the East India Company. Accordingly, the English set up business centres at **Agra, Ahmedabad and Broach**. Slowly the English East India Company succeeded in expanding its area of trade.

In 1639, **Francis Day** established the city of **Madras** and constructed the **Fort St. George**. On the west coast, the Company obtained Bombay on lease from their King, Charles II for a rent of 10 pounds per annum in 1668. By the year 1690, Job Charnock, the agent of the East India Company purchased three villages namely, Sutanuti, Govindpur and Kalikatta, which, in course of time, <sup>Warren Hastings</sup> grew into the city of Calcutta. It was fortified by Job Charnock, who named it Fort William after the English King, William III. The factories and trading centres which the English established all along the sea-coast of India were grouped under three presidencies namely Bombay, Madras and Calcutta. After the **Battle of Plassey in 1757** and the **Battle of Buxar in 1764**, the Company became a political power. India was under the East India Company's rule till 1858 when it came under the direct administration of the British Crown. Robert Clive was the first Governor of Fort William under the Company's rule. He was succeeded by Verelst and Cartier. In 1772, the Company appointed Warren Hastings as the Governor of Fort William.

##### Reforms of Warren Hastings

When Warren Hastings assumed the administration of Bengal in 1772, he found it in utter chaos. The financial position of the Company became worse and the difficulties were intensified by famine. Therefore,

Warren Hastings realized the immediate need for introducing reforms.

##### Abolition of the Dual System

The East India Company decided to act as Diwan and to undertake the collection of revenue by its own agents. Hence, the Dual System introduced by Robert Clive was abolished. As a measure to improve the finances of the Company, Warren Hastings reduced the Nawab's allowance of 32 lakhs of rupees to half that amount. He also stopped the annual payment of 26 lakhs given to the Mughal Emperor.

##### Revenue Reforms

After the abolition of the Dual System, the responsibility of collecting the revenue fell on the shoulders of the Company. For that purpose, a **Board of Revenue** was established at Calcutta to supervise the collection of revenue. English Collectors were appointed in each district. The treasury was removed from Murshidabad to Calcutta and an Accountant General was appointed. **Calcutta thus became the capital of Bengal in 1772** and shortly after of British India.

The Board of Revenue farmed out the lands by auction for a period of five years instead of one year in order to find out their real value. The zamindars were given priority in the auction. However, certain good measures were taken to safeguard the interests of the peasants. Arbitrary cesses and unreasonable fines were abolished. Besides, restrictions were imposed on the enhancement of rent. Yet, the system was a failure. Many zamindars defaulted and the arrears of revenue accumulated.

##### Reorganisation of the Judicial System

The judicial system at the time of Warren Hastings' ascendancy was a store-house of abuses. The Nawab who was hitherto the chief administrator of justice, misused his powers. Often, his judgments were careless. The zamindars who acted as judges at lower levels within their own areas were highly corrupt and prejudiced. On the whole, the judicial institution suffered from extreme corruption.

Warren Hastings felt the necessity of reorganising the judicial system. Each district was provided with a civil court under the Collector and a criminal court under an Indian Judge. To hear appeals from the district courts two appellate courts, one for civil cases and another for criminal cases, were established at Calcutta. The highest civil court of appeal was called *Sadar Diwani Adalat*, which was to be presided over by the Governor and two judges recruited from among the members of his council. Similarly, the highest appellate criminal court was known as *Sadar Nizamat Adalat* which was to function under an Indian judge appointed by the Governor-in-Council.

Experts in Hindu and Muslim laws were provided to assist the judges. A digest of Hindu law was prepared in Sanskrit by learned Pandits and it was translated into Persian. An English translation of it - Code of Hindu Laws - was prepared by Halhed.

## Trade Regulations and other Reforms

Warren Hastings abolished the system of *dastaks*, or free passes and regulated the internal trade. He reduced the number of custom houses and enforced a uniform tariff of 2.5 percent for Indian and non-Indian goods. Private trade by the Company's servants continued but within enforceable limits. Weavers were given better treatment and facilities were made to improve their condition. He also introduced a uniform system of pre-paid postage system. A bank was started in Calcutta. He improved the police in Calcutta and the dacoits were severely dealt with.

## The Regulating Act of 1773

The Regulating Act of 1773 opened a new chapter in the constitutional history of the Company. Previously, the Home government in England consisted of the Court of Directors and the Court of Proprietors. The Court of Directors were elected annually and practically managed the affairs of the Company. In India, each of the three presidencies was independent and responsible only to the Home Government. The government of the presidency was conducted by a Governor and a Council. The following conditions invited the Parliamentary intervention in the Company's affairs. The English East India Company became a territorial power when it acquired a wide dominion in India and also the Diwani rights. Its early administration was not only corrupt but notorious. When the Company was in financial trouble, its servants were affluent. The disastrous famine which broke out in Bengal in 1770 affected the agriculturists. As a result, the revenue collection was poor. In short, the Company was on the brink of bankruptcy. In 1773, the Company approached the British government for an immediate loan. It was under these circumstances that the Parliament of England resolved to regulate the affairs of the Company. Lord North, the Prime Minister of England, appointed a select committee to inquire into the affairs of the Company. The report submitted by the Committee paved the way for the enactment of the Regulating Act.

## Provisions of the Act

The Regulating Act reformed the Company's Government at Home and in India. The important provisions of the Act were:

- (i) The term of office of the members of the Court of Directors was extended from one year to four years. One-fourth of them were to retire every year and the retiring Directors were not eligible for re-election.
- (ii) The Governor of Bengal was styled the Governor-General of Fort William whose tenure of office was for a period of five years.
- (iii) A council of four members was appointed to assist the Governor-General. The government was to be conducted in accordance with the decision of the majority. The Governor-General had a casting vote in case of a tie.
- (iv) The Governor-General in Council was made supreme over the other Presidencies in matters of war and peace.
- (v) Provision was made in the Act for the establishment of a Supreme Court at Calcutta consisting of a Chief Justice and three junior judges. It was to be independent of the Governor-General in Council. In 1774, the Supreme Court was established by a Royal Charter.
- (vi) This Act prevented the servants of the Company including the Governor-General, members of his council and the judges of the Supreme Court from receiving directly or indirectly any gifts in kind or cash.

## Merits and Demerits of the Act

The significance of the Regulating Act is that it brought the affairs of the Company under the control of the Parliament. Besides, it proved that the Parliament of England was concerned about the welfare of Indians. The greatest merit of this Act is that it put an end to the arbitrary rule of the Company and provided a framework for all future enactments relating to the governing of India.

The main defect of the Act was that the Governor-General was made powerless because the council which was given supreme power often created deadlocks by over-ruling his decision. However, many of these defects were rectified by the Pitt's India Act of 1784.

## Expansionist Policy of Warren Hastings

Warren Hastings was known for his expansionist policy. His administration witnessed the Rohilla War, the First Anglo-Maratha War and the Second Anglo-Mysore War.

## The Rohilla War (1774)

Rohilkand was a small kingdom situated in between Oudh and the Marathas. Its ruler was **Hafiz Rahmat Khan**. He concluded a defensive treaty in 1772 with the Nawab of Oudh fearing an attack by the Marathas. But no such attack took place. But, the Nawab demanded money. When Rahmat Khan evaded, the Nawab with the help of the British invaded Rohilkand. Warren Hastings, who sent the British troops against Rohilkand was severely criticised for his policy on Rohilla affair.

## First Anglo-Maratha War (1775-82)

The Marathas were largely remained disunited since the Third Battle of Panipet (1761). The internal conflict among the Marathas was best utilized by the British in their expansionist policy. In 1775, there was a dispute for the post of Peshwa between Madhav Rao and his uncle Raghunatha Rao. The British authorities in Bombay concluded the Treaty of Surat with Raghunatha Rao in March 1775. Raghunatha Rao promised to cede Bassein and Salsette to the British but later when he was unwilling to fulfill his promise, the British captured them. This action of the Bombay Government was not approved by Warren Hastings. In 1776, Warren Hastings sent Colonel Upton to settle the issue. He cancelled the **Treaty of Surat** and concluded the **Treaty of Purander** with Nana Fadnavis, another Maratha leader. According to this treaty Madhava Rao II was accepted as the new Peshwa and the British retained Salsette along with a heavy war indemnity.

However, the Home authorities rejected the Treaty of Purander. Warren Hastings also considered the Treaty of Purandar as a 'scrap of paper' and sanctioned operations against the Marathas. In the meantime, the British force sent by the Bombay Government was defeated by the Marathas.

In 1781, Warren Hastings dispatched British troops under the command of Captain Popham. He defeated the Maratha chief, Mahadaji Scindia, in a number of small battles and captured Gwalior.

Later in May 1782, the **Treaty of Salbai** was signed between Warren Hastings and Mahadaji Scindia. Accordingly, Salsette and Bassein were given to the British. Raghunath Rao was pensioned off and Madhav Rao II was accepted as the Peshwa.

The Treaty of Salbai established the British influence in Indian politics. It provided the British twenty years of peace with the Marathas. The Treaty also enabled the British to exert pressure on Mysore with the help of the



Marathas in recovering their territories from Haider Ali. Thus, the British, on the one hand, saved themselves from the combined opposition of Indian powers and on the other, succeeded in dividing the Indian powers.

### **The Second Anglo-Mysore War (1780-84)**

The first Anglo-Mysore War took place in 1767-69. Haider Ali emerged victorious against the British and at the end of the War a defensive treaty was concluded between Haider Ali and the British. After eleven years, the Second Mysore War broke out and the main causes for the second Anglo-Mysore War were:

1. The British failed to fulfill the terms of the defensive treaty with Haider when he was attacked by the Marathas in 1771.
2. There was an outbreak of hostilities between the English and the French (an ally of Haider) during the American War of Independence.
3. The British captured Mahe, a French settlement within Haider's territories.
4. Haider Ali formed a grand alliance with the Nizam of Hyderabad and the Marathas against the British in 1779. The War began when the British led their forces through Haider's territory without his permission to capture Guntur in the Northern Sarkars. Haider Ali defeated Colonel Baillie and captured Arcot in 1780. In the next year, Warren Hastings, by a clever stroke of diplomacy, divided the Confederacy. He made peace with the Nizam, won the friendship of Bhonsle and came to an understanding with the Scindia (both Marathas). Consequently, Haider was isolated without any alliance. He was defeated by Sir Eyre Coote at Porto Novo in March 1781. In December 1782, Haider died of cancer at the age of sixty and his death was kept secret till his son Tipu Sultan assumed power.

The Second Mysore War came to an end by the **Treaty of Mangalore in 1783**. Accordingly, all conquests were mutually restored and the prisoners on both sides were liberated.

### **Pitt's India Act, 1784**

The Regulating Act proved to be an unsatisfactory document as it failed in its objective. In January 1784, Pitt the Younger (who became Prime Minister of England after the General Elections) introduced the India Bill in the British Parliament. Despite bitter debate in both the Houses, the bill was passed after seven months and it received royal assent in August 1784. This was the famous Pitt's India Act of 1784.

#### **Main Provisions**

- (i) A **Board of Control** consisting of six members was created. They were appointed by the Crown.
- (ii) The Court of Directors was retained without any alteration in its composition.
- (iii) The Act also introduced significant changes in the Indian administration. It reduced the number of the members of the Governor-General's Council from four to three including the Commander-in-Chief. Pitt's India Act constitutes a significant landmark with regard to the foreign policy of the Company. A critical review of the Act reveals that it had introduced a kind of contradiction in the functions of the Company. The Court of Directors controlled its commercial functions, whereas the Board of Control maintained its political affairs. In fact, the Board represented the King, and the Directors symbolised the Company.

### **The Impeachment of Warren Hastings**

The Pitt's India Act of 1784 was a rude shock and bitter disappointment for Warren Hastings. The Prime Minister's speech censuring the policy of the

Government of Bengal was considered by Warren Hastings as a reflection on his personal character. His image and reputation were tarnished in England. Therefore, he resigned and left India in June 1785.

In 1787, Warren Hastings was impeached in the Parliament by Edmund Burke and the Whigs for his administrative excess. Burke brought forward 22 charges against him. The most important of them were related to the Rohilla War, the Case of Nanda Kumar, the treatment of Raja Chait Singh of Benares and the pressures on the Begums of Oudh. After a long trial which lasted till 1795, Warren Hastings was completely acquitted. He received pension from the Company and lived till 1818.

Nanda Kumar was an influential official in Bengal. He was hanged to death by the verdict of the Supreme Court at Calcutta for a petty offence of forgery. The English law was applied in this judgement. It was contended that Warren Hastings and Sir Elija Impey, the judge of the Supreme Court conspired against Nanda Kumar. Warren Hastings imposed heavy penalty on the Raja Chait Singh of Benares for his delay in payment of tribute and deposed him in an unjust manner.

The Begums of Oudh were mother and grand mother of the Nawab of Oudh. Warren Hastings helped the Nawab by sending his troops to the help of Nawab who squeeze money from the Begums. This was a highhanded policy.

### **Estimate of Warren Hastings**

He was a gifted personality endowed with 'strong will, great energy and resourcefulness'. His long stay in Bengal 'in the shadow of the Mughal cultural tradition' gave him, enough opportunity to learn oriental languages such as Bengali (the local language) and Persian (the diplomatic language) and to develop 'oriental tastes'. Since he considered Indian culture as a basis for sound Indian administration, he patronised the learning of Indian languages and arts. His task was a challenging one since he was surrounded by hostile forces. "He faced his external enemies with unflinching courage and unfailling resource, and his internal opponents with extraordinary patience and firmness." It was on the foundation which Warren Hastings laid down, that others erected a 'stately edifice'.

## **Chapter 2** **Lord Cornwallis (1786-1793)**

### *Learning Objectives*

#### *Students will understand*

1. *The Third Mysore War and Tipu Sultan's efforts to defeat the British.*
2. *Administrative Reforms of Lord Cornwallis.*
3. *Judicial Reforms.*
4. *Police and other reforms.*
5. *Achievements of Lord Cornwallis.*

Lord Cornwallis, a warrior-statesman, succeeded Warren Hastings as Governor-General in 1786. He belonged to an influential and aristocratic family which had wider political connections. He was also a close friend of Prime Minister Pitt and of Dundas, the most influential member of the Board of Control. He distinguished himself as a remarkable soldier in the American War of Independence. Although he surrendered at York Town in 1781 before the American troops, his reputation was not spoiled. He still enjoyed the confidence of the authorities at Home. After his return from America he was offered the Governor-Generalship in India.

Cornwallis was prompted by a strong sense of public duty and enjoyed the respect as well as the confidence of his fellow countrymen. The Parliament was prepared to **LORD CORNWALLIS** give him extraordinary legal powers to carry out radical reforms in the administration of Bengal. It amended Pitt's India Act in 1786 so as enable him to overrule the decision of the majority of his council, if necessary. The appointment of Cornwallis was significant in one respect. A new tradition of choosing a person from an aristocratic family for the post of Governor-General was initiated. It was his good fortune that he had an excellent team of subordinates comprising John Shore, James Grant, and Sir William Jones. Although Cornwallis commenced his work under beneficial circumstances, he had to carry out his policy with caution.

### Tipu Sultan and the Third Mysore War (1790-92)

The Treaty of Mangalore (1784) exhibited the military strength of Mysore, exposed English weaknesses and increased Tipu's strength. Like his father he wanted to eliminate the English from India. His other designs were to wreak vengeance on the Nizam and on the Marathas as they had betrayed his father during the hour of need.

#### The chief causes for the Third Mysore War were:

1. Tipu Sultan strengthened his position by undertaking various internal reforms. This created worries to the British, the Nizam of Hyderabad and the Marathas.
  2. Moreover, Tipu made attempts to seek the help of France and Turkey by sending envoys to those countries.
  3. He also expanded his territories at the cost of his neighbours, particularly the Raja of Travancore, who was an ally of the British.
  4. In 1789, the British concluded a tripartite alliance with the Nizam and the Marathas against Tipu.
- War broke out in May 1790 between the English and Tipu. It was fought in three phases.

The first phase commenced when Medows, the Governor of Madras, initially directed the campaign to invade Mysore but Tipu's rapid movements halted the progress of the English troops and inflicted heavy losses on them. In the meantime, Cornwallis himself assumed command in December 1790. This was the beginning of the second phase of the war. Marching from Vellore, he captured Bangalore in March 1791, but Tipu's brilliant strategies prolonged the war and Cornwallis was forced to retreat to Mangalore due to lack of provisions. The third phase of the war began when timely aid from the Marathas with plenty of provisions helped him to resume his campaign and marched against Srirangapattinam again. This time Tipu was at a disadvantage. Swiftly the English forces occupied the hill forts near Srirangapattinam and seized it in February 1792. Tipu Sultan concluded the **Treaty of Srirangapattinam** with the British. The terms of the treaty were as follows:

- (i) Tipu had to give up half his dominions.
  - (ii) He had to pay a war indemnity of three crore rupees and surrender two of his sons as hostages to the English.
  - (iii) Both sides agreed to release the prisoners of war.
- The Treaty of Srirangapattinam is a significant event in the history of South India. The British secured a large territory on the Malabar Coast. In addition they obtained the Baramahal district and Dindugal. After this war, although the strength of Mysore had been reduced, it was not extinguished. Tipu had been defeated but not destroyed.

The internal reforms of Cornwallis can be studied under three main heads.

- (i) Administrative reforms
- (ii) Revenue reforms or Permanent Settlement (given in Lesson -7)
- (iii) Judicial and other reforms **Administrative Reforms**

The greatest work of Cornwallis was the purification of the civil service by the employment of capable and honest public servants. He aimed at economy, simplification and purity. He found that the servants of the Company were underpaid. But they received very high commissions on revenues. In addition to that they conducted forbidden and profitable private trade in the names of relatives and friends. Cornwallis, who aimed at cleansing the administration, abolished the vicious system of paying small salaries and allowing enormous perquisites. He persuaded the Directors of the Company to pay handsome salaries to the Company servants in order that they might free themselves from commercial and corrupting activities.

Further, Cornwallis inaugurated the policy of making appointments mainly on the basis of merit thereby laying the foundation of the Indian Civil Service. To cut down on extravagances, he abolished a number of surplus posts. Another major reform that Cornwallis introduced was the separation of the three branches of service, namely commercial, judicial and revenue. The collectors, the king-pins of the administrative system were deprived of their judicial powers and their work became merely the collection of revenue.

In the work of judicial reorganization, Cornwallis secured the services of Sir William Jones, who was a judge and a great scholar. Civil and criminal courts were completely reorganized.

1. At the top of the judicial system, the highest civil and criminal courts of appeal, namely *Sadar Diwani Adalat* and *Sadar Nizamat Adalat* were functioning at Calcutta. Both of them were presided over by the Governor-General and his Council.
2. There were four provincial courts of appeal at Calcutta, Dacca, Murshidabad and Patna, each under three European judges assisted by Indian advisers.
3. District and City courts functioned each under a European judge. Every district was provided with a court. As already stated, Cornwallis had taken away from the collectors of their judicial powers and made them solely responsible for the collection of revenue. As a result, District Judges were appointed.
4. Indian judges or *Munsiffs* were appointed to all the courts at the bottom of the judicial system.

In criminal cases, Muslim law was improved and followed. In civil cases, Hindu and Muslim laws were followed according to the religion of the litigants. In suits between Hindus and Muslims, the judge was the deciding authority. Cornwallis was merciful by temperament. He hated barbarous punishments and abolished those like mutilation and trial by ordeal. Cornwallis was better known as a law giver than as an administrator. With the help of his colleague, George Barlow, Cornwallis prepared a comprehensive code, covering the whole field of administration, judicial, police, commercial and fiscal. This Code was based upon the principle of Montesquieu, "the Separation of Powers", which was popular in the West in 18<sup>th</sup> century. In order to curb undue exercise of authority Cornwallis made all officials answerable to the courts.

### Police Reforms

The effective implementation of judicial reforms

required the reorganisation of police administration. The District Judge controlled the police. Each district was divided into *thanas* or police circles each of which was about 20 square miles. It was placed under an Indian officer called the *daroga* who was ably assisted by many constables. However, the police organization was not effective. In the words of Marshman, 'the *daroga* enjoyed almost unlimited power of extortion and became the scourge of the country'.

### Other Reforms

Cornwallis reformed the **Board of Trade** which managed the commercial investments of the Company. With the aid of Charles Grant, he eradicated numerous abuses and corrupt practices. Fair treatment was given to weavers and Indian workers. He increased the remuneration for honest service.

### Estimate of Cornwallis

Cornwallis, a blue-blooded aristocrat, was an ardent patriot. He discharged his duties fearlessly, and his life was an embodiment of 'duty and sacrifice'. He perceived the danger of Tipu's growing power and curtailed it by boldly discarding the policy of nonintervention. As an administrator, he consolidated the Company's position in India and started the tradition of efficient and pure administration. Although there were defects in his Permanent Settlement of Land Revenue, his administrative and judicial reforms were solid achievements. He may be regarded the parent of the Indian Administrative Service and founder of an efficient and clean system of administration. Sir John Shore (1793-98) succeeded Cornwallis as Governor General and his administration was uneventful.

## Chapter 3 Wellesley (1798-1805)

1. *The political condition of India at the time of the arrival of Lord Wellesley*
2. *The Meaning of Subsidiary System*
3. *Merits and defects of the Subsidiary System*
4. *The Indian states that come under this system*
5. *Fourth Mysore War and the final fall of Tipu Sultan*
6. *War with the Marathas.*
7. *Estimate of Lord Wellesley*

The appointment of Richard Colley Wellesley as Governor-General marks an epoch in the history of British India. He was a great imperialist and called himself 'a Bengal tiger'. Wellesley came to India with a determination to launch a forward policy in order to make 'the British Empire in India' into 'the British Empire of India'. The system that he adopted to achieve his object is known as the 'Subsidiary Alliance'.

### Political Condition of India at the time of Wellesley's Arrival

In the north-western India, the danger of Zaman Shah's aggression posed a serious threat to the British power in India. In the north and central India, the Marathas remained a formidable political power. The Nizam of Hyderabad employed the Frenchmen to train his army. The political unrest in the Kamatak region continued and Tipu Sultan had remained the uncompromising enemy of the British.

Moreover, the policy of neutrality adopted by Sir John Shore, the successor of Cornwallis, created a kind of political unrest in India and greatly affected the prestige of the English. His non-intervention policy contributed

much to the growth of anti-British feelings. Further, Napoleon's move for an Eastern invasion created a fear among English statesmen. It was in this light that Wellesley moulded his policy. Preservation of British prestige and removal of French danger from India were Wellesley's twin aims.

He was also thoroughly convinced that only a strong British power in India could reduce and control the existing tyranny and corruption in Indian states. Therefore, he reversed the nonintervention policy of his predecessor and formulated his master plan namely the 'Subsidiary Alliance'.

### The Subsidiary System

The predecessors of Wellesley concluded alliances with Indian princes like the Nawab of Oudh and the Nizam of Hyderabad. They received subsidies from the Indian rulers for the maintenance of British troops, which were used for the protection of respective Indian states. Wellesley enlarged and consolidated the already existing system. However, his originality was revealed in its application.

### Main Features of Subsidiary Alliance

1. Any Indian ruler who entered into the subsidiary alliance with the British had to maintain a contingent of British troops in his territory. It was commanded by a British officer. The Indian state was called '**the protected state**' and the British hereinafter were referred to as '**the paramount power**'. It was the duty of the British to safeguard that state from external aggression and to help its ruler maintain internal peace. The protected state should give some money or give part of its territory to the British to support the subsidiary force.
2. The protected state should cut off its connection with European powers other than the English and with the French in particular. The state was also forbidden to have any political contact even with other Indian powers without the permission of the British.
3. The ruler of the protected state should keep a British Resident at his court and disband his own army. He should not employ Europeans in his service without the sanction of the paramount power.
4. The paramount power should not interfere in the internal affairs of the protected state.

### Benefits to the British

Wellesley's Subsidiary System is regarded as one of the masterstrokes of British imperialism. It increased the military strength of the Company in India at the expense of the protected states. The territories of the Company were free from the ravages of war thereby establishing the stability of the British power in India. The position of the British was strengthened against its Indian and non-Indian enemies. Under the system, expansion of British power became easy. Thus Wellesley's diplomacy made the British the paramount power in India.

### Defects of the Subsidiary System

The immediate effect of the establishment of subsidiary forces was the introduction of anarchy because of the unemployment of thousands of soldiers sent away by the Indian princes. The freebooting activities of disbanded soldiers were felt much in central India where the menace of Pindaris affected the people. Further, the subsidiary system had a demoralizing effect on the princes of the protected states. Safeguarded against external danger and internal revolt, they neglected their administrative responsibilities. They preferred to lead easy-going and pleasure-seeking lives.



As a result misgovernment followed. In course of time, the anarchy and misrule in several states had resulted in their annexation by the British. Thus, the subsidiary system proved to be a preparation for annexation. Furthermore, the British collected very heavy subsidies from the protected princes and this had adversely affected their economy.

### Enforcement of the Subsidiary System

**Hyderabad:** Hyderabad was the first state which was brought under Wellesley's Subsidiary System in 1798. The treaty concluded in 1798 was an ad hoc measure. It fixed the amount to be paid annually at Rs.24 lakhs for the subsidiary force. In accordance with the treaty, all the French troops in Hyderabad were disbanded and replaced by a subsidiary British force. A new treaty was concluded in 1800 by which the Nizam ceded large territories to the Company and this constitutes the famous Ceded Districts.

**Oudh:** The threat of invasion by Zaman Shah of Afghanistan was the pretext for Wellesley to force the Nawab of Oudh to enter into a subsidiary treaty. Accordingly, the Nawab gave the British the rich lands of Rohilkhand, the lower Doab and Gorakhpur for the maintenance of an increased army which the British stationed in the capital of Oudh. The strength of Nawab's own army was reduced. For the maintenance of law and order the British were authorised to frame rules and regulations. By this, the British acquired the right to interfere in the internal matters of Oudh. Although the Company obtained a fertile and populous territory, which increased its resources, the highhanded action of Wellesley was severely criticized.

### Tanjore, Surat and the Karnatak

Wellesley assumed the administration of Tanjore, Surat and the Karnatak by concluding treaties with the respective rulers of these states. The Maratha state of Tanjore witnessed a succession dispute. In 1799, Wellesley concluded a treaty with Serfoji. In accordance with this treaty the British took over the administration of the state and allowed Serfoji to retain the title of Raja with a pension of 4 lakhs of rupees.

**Raja Sarbhoji** was a man of culture and attractive manners. He was the disciple of Schwarts. He built the **Saraswathi Mahal Library** in Tanjore which contains valuable books and manuscripts. He patronized art and culture.

The principality of Surat came under British protection as early as 1759. The Nawab of this historic city died in 1799 and his brother succeeded him. The change of succession provided Wellesley an opportunity to take over the administration of Surat. The Nawab was allowed to retain the title and given a pension of one lakh of rupees.

The people of Karnatak had been suffering for a long time by the double government. The Nawab, Umadat-ul-Umara was an incompetent ruler noted for his extravagance and misrule. He died in the middle of 1801 and his son, Ali Hussain became the Nawab. Wellesley asked him to retire with a liberal pension leaving the administration to the English. Since he refused, Wellesley signed a treaty with Azim-ud daulah, the nephew of the deceased Nawab in 1801. Accordingly the entire military and civil administration of the Karnatak came under the British.

### The Fourth Anglo-Mysore War (1799)

The circumstances which led to the Fourth Mysore War can be summarized as follows: Tipu Sultan wanted to avenge his humiliating defeat and the terms imposed on

him by the British. He also aimed at making Mysore a strong state. Tipu worked continuously to secure help to fight British imperialism. He took efforts to seek the help of the France, Arabia, Kabul and Turkey. He corresponded with the Revolutionary French Government in July 1798. At Srirangapattinam, a Jacobian Club was started and the flag of the French Republic was hoisted. The tree of Liberty was also planted. Later, when Napoleon came to power, Tipu received a friendly letter from Napoleon (who was in Egypt at that time).

It was at this juncture that Wellesley reached Calcutta with a mind already filled with fear of Napoleon. Therefore, he prepared for a war against Mysore. As a part of his strategy, Wellesley tried to revive the Triple Alliance of 1790 with the Marathas. Though his proposal was not accepted by the Marathas, they promised to remain neutral. However, a Subsidiary Alliance with the Nizam was concluded by the British and as a consequence, the French force at Hyderabad was disbanded.

Wellesley set out to persuade Tipu to accept a pact of subsidiary alliance and wrote letters requesting the Tipu to dismiss the French, to receive an English envoy, and to make terms with the Company and its allies. Tipu paid scant attention to Wellesley's letters and thus the Fourth Anglo-Mysore war started.

The war was short and decisive. As planned, the Bombay army under General Stuart invaded Mysore from the west. The Madras army, which was led by the Governor-General's brother, Arthur Wellesley, forced Tipu to retreat to his capital Srirangapattinam. Although severely wounded, he fought till his capital Srirangapattinam was captured and he himself was shot dead.

### Mysore After the War

With the fall of Tipu Sultan the kingdom of Mysore fell at the feet of Wellesley. He restored Hindu rule at the central part of the kingdom. A five year old boy, Krishnaraja III, a descendant of the dethroned Hindu Raja, was enthroned at Mysore, which became the capital almost after two hundred years. Purnaiya, the previous minister, became *Diwan*. The remaining parts of the kingdom were divided between the British and the Nizam. The whole of Kanara, Wynad, Coimbatore, Dharmapuri and Srirangapattinam were retained by the British whereas the Nizam was given the areas around Gooty and a part of Chittoor and Chitaldurg districts. A British Resident was stationed at Mysore. Tipu's family was sent to the fort of Vellore.

### Wellesley and the Marathas

The only power that remained outside the purview of the subsidiary system was the Marathas. Nana Fadnavis provided the leadership to the Marathas. He was responsible for the preservation of independence of his country from the onslaught of the British. By extending a helping hand to Cornwallis against Tipu he was able to acquire a large slice of territory as the share of the Marathas from the kingdom of Mysore. His death in 1800 removed the last great Maratha leader.

Peshwa Baji Rao II, despite his stately appearance and immense learning, lacked political wisdom. The infighting among the Maratha leaders proved to be self-destructive. Jaswant Rao Holkar and Daulat Rao Scindia were fighting against each other. The Peshwa supported Scindia against Holkar. Holkar marched against the Peshwa. The combined forces of Scindia and the Peshwa were utterly defeated. The city of Poona fell at

the feet of the victor who did not hesitate to commit all sorts of atrocities, including the torturing of rich inhabitants. With rich booty Holkar returned to his capital.

Peshwa Baji Rao II was in great danger, so he fled to Bassein where he signed the **Treaty of Bassein** with the British in 1802. It was a subsidiary treaty and the Peshwa was recognized as the head of the Maratha kingdom. Although it was nominal, the treaty was considered the crowning triumph of Wellesley's Subsidiary System. In accordance with this document, the foreign policy of the Marathas came under British control and therefore any action of the Maratha chiefs against the British was successfully prevented. That is the reason why the Marathas considered the treaty as a document of surrendering their independence.

As an immediate response to the **Treaty of Bassein**, the British troops marched under the command of Arthur Wellesley towards Poona and restored the Peshwa to his position. The forces of Holkar vanished from the Maratha capital.

### The Second Maratha War (1803-1805)

Daulat Rao Scindia and Raghoji Bhonsle took the Treaty of Bassein as an insult to the national honour of the Marathas. Soon the forces of both the chieftains were united and they crossed the river Narmada. Wellesley seized this opportunity and declared war in August 1803. Arthur Wellesley captured Ahmadnagar in August 1803 and defeated the combined forces of Scindia and Bhonsle at Assaye near Aurangabad.

Subsequently, Arthur Wellesley carried the war into Bhonsle's territory and completely defeated the Maratha forces on the plains of Argaon. As a result, the **Treaty of Deogaon** was signed between Bhonsle and Wellesley. The former signed the subsidiary treaty which forced him to give up the province of Cuttack in Orissa.

The campaign of British commander Lord Lake against the forces of Scindia was rather dramatic. Lake triumphantly entered the historic city of Delhi and took Shah Alam, the Mughal Emperor under British protection. Lake was quick in consolidating his conquests. By negotiating with the Raja of Bharatpur, he occupied Agra. Sadly this military engagement proved to be a battle of great slaughter in which thousands of Maratha soldiers perished. Scindia signed a subsidiary treaty with the British. It is known as the **Treaty of Surji - Arjungaon**.

During the war against Bhonsle and Scindia, Holkar remained aloof because he was Scindia's enemy. However, when Wellesley offered an alliance, Holkar made extreme demands. This made Wellesley to declare war against Holkar. The campaign against Holkar was well-organised but the English generals for the first time committed blunders. Holkar remained unsubdued.

### Estimate of Wellesley

An unscrupulous annexationist and an advocate of forward policy, Wellesley was one of the greatest empire-builders that England had ever produced. Wellesley converted the British Empire in India to the British Empire of India. The establishment of British paramountcy in India was his supreme task. He located the weak spots of the Indian powers and applied his political technique (namely Subsidiary Alliance). By the annexation of Karnatak and Tanjore he paved the way for the formation of the Madras Presidency. He rightly deserves to be called the maker of the erstwhile Madras

Presidency and the creator of the Province of Agra. In this manner a great part of the Indian subcontinent was brought under Company protection. "He turned the East India Company from a trading corporation into an imperial power".

*Sir George Barlow was the next Governor-General for two years (1805-07). The Vellore Mutiny of 1806 took place during his administration. He was succeeded by Lord Minto (1807-13) who concluded the Treaty of Amritsar with Ranjit Singh of Punjab in 1809. The Charter Act of 1813 was passed during this period.*

## Chapter 4 Lord Hastings (1813-1823)

*Students will come to know*

1. The condition of India when Lord Hastings became Governor-General.
2. The War with Nepal, the kingdom of the Gurkhas.
3. Who were the Pindaris and how they were exterminated.
4. The third and Final War with the Marathas.
5. The causes for the defeat of the Marathas at the hands of the British.
6. The Reforms introduced by Lord Hastings.
7. An estimate of Lord Hastings.

Lord Hastings became Governor-General in 1813. He adopted a vigorous forward policy and waged wars extensively. His aggressive and imperialist policies paved the way for the general expansion of the British Empire. He further expanded the British power in India. The conditions in India when he assumed power posed a serious threat to the British administration. There was anarchy in central India. The Pindaris plundered the whole region and the Marathas could not control them. Also, there was infighting among the Maratha chiefs. Yet, they were aiming at the expulsion of the British from India. The Peshwa was secretly plotting against the British. Hastings was also troubled by the expansion of the Gurkha power. Therefore, Hastings determined to restore order by suppressing the Pindaris and to eliminate threats to the British power by waging wars with the Marathas and the Gurkhas.

### War against the Gurkhas (1814-16)

Nepal emerged as a powerful Gurkha state in 1768. This country is situated to the north of India with its boundary touching China in the north and Bengal and Oudh in the east and south, respectively. In 1801, the British acquired the districts of Gorakhpur and Basti from the Nawab of Oudh. This move brought the boundary of Nepal to touch the British frontier. The aggressions of the Gurkhas into the British territories culminated in a war. In May 1814, the Gurkhas attacked the British police post and killed 18 policemen and their officer. Hastings declared war on Nepal. In 1814 several battles were fought between the British and the Gurkhas. Amar Singh Thapa, the able General of Nepal Army was forced to surrender.

In March 1816, the **Treaty of Sagauli** was concluded. The Gurkhas gave up their claim over the Tarai region and ceded the areas of Kumaon and Garhwal to the British. The British now secured the area around Simla and their north-western borders touched the Himalayas. The Gurkhas had to withdraw from Sikkim and they also agreed to keep a British Resident at Katmandu. It was also agreed that the kingdom of Nepal would not employ any other foreigner in its services.

other than the English. The British had also obtained the sites of hill stations like Simla, Mussoori, Nainital, Ranikhet and developed them as tourist and health resorts. After this victory in the Gurkha War Hastings was honoured with English peerage and he became Marquis of Hastings.

### Suppression of the Pindaris

The origin of Pindaris is lost in obscurity. The first reference about them is during the Mughal invasion of Maharashtra. They did not belong to any particular caste or creed. They used to serve the army without any payment but instead were allowed to plunder. During the time of Baji Rao I, they were irregular horsemen attached to the Maratha army. It is worth mentioning here that they never helped the British. They were mostly active in the areas of Rajputana and the Central Provinces and subsisted on plunder. Their leaders belonged to both the Hindu as well as the Muslim communities. Chief amongst them were Wasil Muhammad, Chitu and Karim Khan. They had thousands of followers.

In 1812, the Pindaris plundered the districts of Mirzapur and Shahabad and in 1815 they raided the Nizam's dominions. In 1816, they plundered the Northern Circars. Lord Hastings determined to suppress the Pindaris. For this he gathered a large army of 1,13,000 men and 300 guns and attacked the Pindaris from four sides. He himself took command of the force from the north while Sir Thomas Hislop commanded the force from the south. By 1818, the Pindaris were completely suppressed and all their bands disintegrated. Karim Khan was given a small estate in the Gorakhpur district of the United Provinces. Wasil Muhammad took refuge in the Scindia's camp but the latter handed him over to the British. Wasil committed suicide in captivity and Chitu escaped to the forest, where a tiger killed him. Thus, by 1824, the menace of the Pindaris came to an end.

### Downfall of the Maratha Confederacy

The third major achievement of Lord Hastings was against the Marathas. In reality, the Maratha power had weakened considerably after the **Third Battle of Panipat** (1761) and the two subsequent wars against the British. But the Marathas had not finally crushed out. The Maratha chiefs fought amongst themselves and their successors were invariably weak and incapable. The relationships of powerful Maratha chiefs like the Bhonsle, Gaekwar, Scindia, Holkar and the Peshwa were ridden with mutual jealousies.

Peshwa Baji Rao II wanted to become the head of the Maratha Confederacy and at the same time wanted freedom from the British control. His Chief Minister Tirimbakji encouraged him.

On the advice of the Company, the Gaekwar sent his Prime Minister Gangadhar Shastri to negotiate with the Peshwa. On his way back, Gangadhar Shastri, was murdered at Nasik in July 1815, at the instance of Triambakji.

This caused a lot of anger not only among the Marathas but also among the British. The latter asked the Peshwa to handover Triambakji to them. Peshwa handed over his Minister to the British, who lodged him in Thana jail from where he escaped. Consequently, on 13 June 1817, the British Resident Elphinstone forced the Peshwa to sign the **Treaty of Poona**. Baji Rao gave up his desire to become the supreme head of the Marathas.

### Third Maratha War (1817-1819)

But soon the Peshwa undid this treaty with the British

and on 5 November 1817 attacked the British Residency. He was defeated at a place called Kirkee. Similarly, the Bhonsle chief, Appa Sahib also refused to abide by the **Treaty of Nagpur**, which he had signed with the British on 17 May 1816. According to this treaty, Nagpur came under the control of the Company. He fought with the British in the **Battle of Sitabaldi** in November 1817, but was defeated. The Peshwa now turned to Holkar for help, but Holkar too was defeated by the British on 21 December 1817 at Baroda. Therefore, by December 1817 the dream of a Mighty Maratha Confederacy was finally shattered.

In 1818, Scindia was also forced to sign a new treaty with the British on the basis of which Ajmer was given to the Nawab of Bhopal, who also accepted the British suzerainty. The Gaekwar of Baroda, while accepting the Subsidiary Alliance, agreed to hand over certain areas of Ahmedabad to the British. The Rajput states which were under the Pindaris were freed after the latter's suppression.

The year 1818 was a significant year on account of major political achievements for the British. The Maratha dream of establishing themselves as the paramount power in India was completely destroyed. Thus, the last hurdle in the way of British paramountcy was removed.

### Causes of the Defeat of the Marathas

There were several reasons for the defeat of the Marathas in the Anglo-Maratha Wars. The main reasons were:

- Lack of capable leadership
- Military weakness of the Marathas.
- The major drawback of the Maratha power was mutual bitterness and lack of cooperation amongst themselves.
- The Marathas hardly left any positive impact on the conquered territories.
- The Marathas did not have cordial relations with other princes and Nawabs of India.
- The Marathas failed to estimate correctly the political and diplomatic strength of the British.

### Reforms of Hastings

The Governor-Generalship of Lord Hastings witnessed not only territorial expansion but also the progress of administration. He approved the **Ryotwari system** of land revenue introduced in the Madras Presidency by **Sir Thomas Munroe**. In the sphere of judiciary, the Cornwallis Code was improved. The Police system of Bengal was extended to other regions. The importance of Indian Munsiffs had increased during his administration. The separation of judicial and revenue departments was not rigidly followed. Instead, the District Collector acted as Magistrate.

Hastings had also encouraged the foundation of vernacular schools by missionaries and others. In 1817, the Hindu College was established at Calcutta by the public for the teaching of English and western science. Hastings was the Patron of this college. He encouraged the freedom of the Press and abolished the censorship introduced in 1799. The Bengali Weekly, *Samachar Darpan* was started in 1818 by Marshman, a Serampore missionary.

### Estimate

Lord Hastings was an able soldier and a brilliant administrator. His liberal views on education and Press are commendable. He suppressed the Pindaris, defeated the Marathas and curbed the power of the Gurkhas. His territorial gains strengthened the British power in India. He was considered the maker of the Bombay



Presidency. In short, he completed and consolidated the work of Wellesley.

*Lord Hastings was succeeded by Lord Amherst (1823-28) who fought the First Anglo-Mysore War (1824-26).*

## Chapter 5 Lord William Bentinck (1828-1835)

### Learning Objectives

Students will understand

1. Bentinck's basic attitude towards reforms.
2. His policy towards the Indian states.
3. His cordial relations with Ranjit Singh.
4. The Charter Act of 1833 and its importance.
5. Bentinck's financial and administrative reforms.
6. His social reforms - Abolition of Sati, Suppression of Thugs and prevention of female infanticide.
7. His educational reforms.

Lord William Bentinck assumed the office of the Governor-General in 1828. Born in 1774 he commenced his career as a soldier and later at the young age of twenty two he became a Member of Parliament. He was appointed the Governor of Madras in 1803. He supported Sir Thomas Munroe on revenue administration. The Vellore Mutiny of 1806 had resulted in Bentinck's recall. However, his appointment again to the higher office as Governor-General shows his real greatness. As Governor-General, Bentinck had initiated an era of progress and reforms. He was undoubtedly the first Governor-General of British India who acted on the dictum that "the welfare of the subject peoples was a main, perhaps the primary, duty of the LORD WILLIAM BENTINCK British in India".

### Policy Towards Indian States

William Bentinck adopted a policy of **non-intervention** and **non-aggression** with Indian states. If at all he interfered in the affairs of the Indian states, it was only to end any form of misgovernment and never to annex any territory.

### Mysore

In Mysore, Hindu rule under Krishnaraja III was restored by Wellesley. In the beginning, the young Raja functioned well along with his able minister Puranaiya. Later, when the young raja assumed full control of the government he proved incompetent. The peasantry of the state suffered from many grievances. There was no redressal. Consequently, a revolt of the peasants broke out in 1830 and it was suppressed with the help of an army from Madras. Nonetheless, the British authorities took over the administration of Mysore State and placed it under the control of a commissioner. The Raja was given a pension.

*Sir Mark Cubbon was commissioner from 1834 to 1861 and his administration was beneficial to the people of Mysore. Even today, the famous Cubbon Park in Bangalore city has been named after him to remind his services to Mysore.*

### Cachar and Jaintia

The principality of Cachar lying in the North East Frontier came under the protection of the British in accordance with the **Treaty of Yandaboo** concluded at the end of the first Burmese War. The Raja of this small state was assassinated in 1832 but there was no heir to succeed him. Bentinck annexed this state at the wish of the people.

Jaintia was one of the territories brought under the custody of the British after the first Anglo-Burmese

War. The ruler of the small country behaved in an unruly way by abducting a few subjects of British India with the evil intention of sacrificing them to the goddess Kali. Therefore, the Governor-General acted promptly to avert any recurrence of such cruel abhorrent act and annexed this country.

### Coorg

Vira Raja was a ruthless ruler of Coorg who treated his people with savage barbarity and killed all his male relatives. Lord William Bentinck decided to deal with him effectively and sent Colonel Lindsay to capture Mercara, the capital of the Coorg state. The Raja was deposed in 1834 and the state was annexed.

### Relations with Ranjit Singh

Lord William Bentinck was the first Governor-General to visualise a Russian threat to India. Hence, he was eager to negotiate friendly relations both with the ruler of Punjab, Maharajah Ranjit Singh and also with the Amirs of Sind. His earnest desire was that Afghanistan should be made a buffer state between India and any possible invader. As an initial measure, an exchange of gifts took place between Lahore, the capital of Punjab and Calcutta, the seat of Governor-General. It was then followed by the meeting of Bentinck and Ranjit Singh on 25 October, 1831 at Rupar on the bank of the river Sutlej amidst show and splendor. The Governor-General was successful in winning the friendship of Ranjit Singh and the **Indus Navigation Treaty** was concluded between them. This treaty opened up the Sutlej for navigation. In addition, a commercial treaty was negotiated with Ranjit Singh. A similar treaty was also concluded with the Amirs of Sind.

### Charter Act of 1833

The Regulating Act of 1773 made it compulsory to renew the Company's Charter after twenty years. Hence, the Charter Act of 1793 was passed by the Parliament. It extended the life of Company for another twenty years and introduced minor changes in the existing set up. The Charter Act of 1813 provided one lakh of rupees annually for the promotion of Indian education. It also extended the Company's charter for another twenty years.

The Charter Act of 1833 was a significant constitutional instrument defining the scope and authority of the East India Company. The liberal and **utilitarian philosophy of Bentham** was made popular by the provisions of this Act. Following were the important provisions:

- (i) The English East India Company ceased to be a commercial agency in India. In other words, it would function hereafter as the political agent for the Crown.
- (ii) The Governor-General of Fort William was hereafter called 'the Governor-General of India'. Thus, **Bentinck was the first Governor-General of India**.
- (iii) A Law Member was appointed to the Governor-General's Council. T. B. Macaulay was the first Law Member of the Governor-General-in-Council.
- (iv) The Act categorically stated 'that no native of India, nor any natural born subject of His Majesty, should be disabled from holding any place, office, or employment, by reason of his religion, place of birth, descent or colour'. It was this enactment which laid the foundation for the Indianisation of public services.

After twenty years, the Charter Act of 1853 was passed and it was the last in the series of Charter Acts.

### Reforms of Lord William Bentinck

The advent of Lord William Bentinck ushered in a new

era in the annals of India in many ways. Although his tenure of office covered only a short span of seven years, it saw a period of enduring reforms. They may be classified as financial, administrative, social and educational.

### Financial Reforms

When Bentinck assumed the Governor-Generalship in 1828, the financial position of the Company was poor. The exchequer was very weak. The state budget showed a deficit of one million rupees. It became necessary on the part of the Governor-General to take effective steps to improve the financial condition. To achieve this he adopted the following measures: He reduced the salaries and allowances of all officers and additional staff were removed. In the military department, he abolished the system of double *batta*. (*Batta* was an allowance to troops on active service.) By these financial reforms at the time of his departure, he left the treasury with a surplus of Rs.1.5 millions.

### Administrative Reforms

Bentinck's administrative reforms speak of his political maturity and wisdom. In the judicial department he abolished the provincial courts of appeal established by Cornwallis. They were largely responsible for the huge arrears of cases. This step was readily accepted by the Directors since it cut down their expenditure. Another good measure of Bentinck was the introduction of local languages in the lower courts and English in the higher courts in the place of Persian. Even in matters of revenue Bentinck left his mark. He launched the revenue settlements of the North West Province under the control of R.M. Bird. This settlement was for a period of 30 years and it was made either with the tillers of the soil, or with the landowners.

### Social Reforms

The social reforms of William Bentinck made his name immortal in the history of British India. These include the abolition of *Sati*, the suppression of Thugs and the prevention of female infanticide.

### Abolition of Sati

The practice of *sati*, the age old custom of burning of widows alive on the funeral pyre of their husbands was prevalent in India from ancient times. This inhuman social custom was very common in northern India more particularly in Bengal. Bentinck was greatly distressed when he received a report of 800 cases of *sati* in a single year and that from Bengal. He determined to abolish this practice which he considered an offence against natural justice. Therefore, he became a crusader against it and promulgated his Regulation XVII on 4 December 1829 prohibiting the practice of *sati*. Those who practiced *sati* were made liable for punishment by law courts as accessories to the crime. The Regulation was extended to the Madras and Bombay Presidencies in 1830.

### Suppression of Thugs

The most commendable measure which Bentinck undertook and which contributed to the material welfare of the people was the suppression of the 'thugs'. They were hereditary robbers. They went about in small groups of fifty to hundred posing as commercial gangs or pilgrims 'strangling and robbing peaceful travellers'. They increased in number in central and northern India during the 18th century when anarchy reigned after the disintegration of the Mughal Empire. A campaign was systematically organised by Colonel Sleeman from 1830 against the thugs. During the course of five years nearly 2000 of them were captured. A

greater number of them were exterminated and the rest were transported to the Andaman and Nicobar Islands. For his role in the suppression of thugs, Sir William Sleeman was known as "**Thugee Sleeman**".

### Female Infanticide

Female infanticide was one of the horrible and heartless deeds committed even by civilized people. This practice killing female infants was very much prevalent in places like Rajputana, Punjab, Malwa and Cutch. Bentinck took effective steps to prevent the ritual of child sacrifice at Saugar Island in Bengal. He not only prohibited female infanticide but declared them as punishable crime.

### Introduction of English Education

The introduction of English Education was a significant event of Lord William Bentinck's administration. He appointed a committee headed by **Lord Macaulay** to make recommendations for the promotion of education. In his report, Macaulay emphasized the promotion of European literature and science through English medium to the people of India. This recommendation was wholeheartedly accepted by William Bentinck. The Government Resolution in 1835 made English the official and literary language of India. In the same year, William Bentinck laid foundation of the Calcutta Medical College.

### Estimate of William Bentinck

Bentinck was a "straightforward, honest, upright, benevolent, sensible man". His social reforms such as abolition of *sati* and prevention of child sacrifice eradicated age old evils from Hindu society. It is gratifying to note that "Bentinck acted where others had talked". To enforce the regulations regarding the prohibition of *sati*, he was prepared to risk his own position. Such courage and straightforwardness were seldom found among the administrators of those days. His educational reforms heralded a new age in India. *After William Bentinck, Lord Auckland (1836-42) became Governor-General. The First Afghan War (1836-42) was fought during his administration. Due to his failure in Afghanistan he was recalled in 1842. Lord Ellenborough succeeded him and ended the Afghan War. He also annexed the Sindh. His successor, Lord Hardinge (1844-48) fought the first Anglo-Sikh War (1845-46) and concluded the Treaty of Lahore.*

## Chapter 6 Lord Dalhousie (1848-1856)

*Students will acquire knowledge about*

1. Dalhousie's policy of annexation.
2. Annexation of Punjab and Lower Burma.
3. Doctrine of Lapse, its application to Indian states.
4. Annexation of Oudh on the pretext of misrule.
5. Dalhousie's domestic reforms including the introduction of railways and telegraphs.
6. His educational and other reforms.

Lord Dalhousie was the youngest Governor-General of India when he assumed charge at the age of 36 in 1848. His early career was remarkable. He studied in Christ Church, Oxford. He became Member of Parliament and enjoyed the confidence of Sir Robert Peel, the Prime Minister of England. He did much for the progress of railway construction in England as the president of the Board of Trade. In 1847, he was offered the Governor-Generalship of India which he accepted and arrived at

Calcutta in January 1848.

## Policy of Annexation

The most important aspect of Dalhousie's administration is related to "the great drama of annexation". His aims for expanding the Company's territories were administrative, imperial, commercial and financial. Although he used different reasons for annexation, his main objective was to end misrule in the annexed states, as in the case of the annexation of Oudh. He aimed at providing the beneficent administration to the people of the annexed states. At the same time he had in his mind the advantages of annexation to the British such as imperial defence, commercial and financial benefits. Though Dalhousie did not come to India to follow a policy of annexation, but he was able to consolidate British rule in India by his policy of annexation. His great annexations include the Punjab, Lower Burma, most of the Central Provinces and Oudh.

## Annexation of Punjab

At the end of the second Anglo-Sikh War in 1849, Punjab was annexed by Dalhousie. He organized the administration of Punjab very efficiently. The province was divided into small districts under the control of District Officers who were called Deputy Commissioners. These commissioners with the help of their assistants came into close contact with people. Revenue and judicial departments were combined to secure concentration of power and responsibility. The laws and procedure were simplified in accordance with the custom of the people. The overall administration of Punjab was entrusted to the Chief Commissioner. In fact, the Governor-General was the virtual ruler of Punjab. The services of Lawrence brothers in the administration of Punjab were notable. Within three years perfect order was restored in the province. It was efficiently defended from internal and external enemies. In 1859, Sir John Lawrence became the Lieutenant Governor of Punjab.

## Second Burmese War and the Annexation of Lower Burma

In 1852, commercial disputes in Rangoon prompted new hostilities between the British and the Burmese. After the end of the second Burmese War (1852), Dalhousie annexed Lower Burma with its capital at Pegu. Major Arthur Phayre was appointed the Commissioner of the new province. His administration also proved to be efficient. The annexation of Lower Burma proved beneficial to Britain. Rangoon, Britain's most valuable acquisition from the war became one of the biggest ports in Asia.

## Doctrine of Lapse

Dalhousie also took advantage of every opportunity to acquire territory by peaceful means. The East India Company was rapidly becoming the predominant power in India. It had concluded alliances with Indian rulers. It promised to support them and their heirs in return for various concessions. Although this type of agreement favoured the British, Dalhousie sought to acquire even more power. According to the Hindu Law, one can adopt a son in case of no male heir to inherit the property. The question arose whether a Hindu ruler, holding his state subordinate to the paramount power, could adopt a son to succeed his kingdom. It was customary for a ruler without a natural heir to ask the British Government whether he could adopt a son to succeed him. According to Dalhousie, if such permission was refused by the British, the state would "lapse" and

thereby become part of the British India. Dalhousie maintained that there was a difference in principle between the right to inherit private property and the right to govern. This principle was called the **Doctrine of Lapse**.

The Doctrine of Lapse was applied by Dalhousie to Satara and it was annexed in 1848. Jhansi and Nagpur were annexed in 1854. As a result of these annexations, a large part of the Central Provinces came under the British rule. The new province was governed by a Chief Commissioner from 1861.

Although the Doctrine of Lapse cannot be regarded as illegal, its application by Dalhousie was disliked by Indian princes. The advantages of the annexations of Satara, Jhansi and Nagpur were substantial to the British. Dalhousie was blamed for using the Doctrine of Lapse as an instrument in pursuing his policy of annexation. After the Mutiny of 1857, the doctrine of lapse was withdrawn. *Later during the Mutiny of 1857, Rani Lakshmi Bai of Jhansi played an important role in fighting against the British.*

## Annexation of Oudh

The British relations with the state of Oudh go back to the Treaty of Allahabad in 1765. Right from Warren Hastings, many Governor-Generals advised the Nawab of Oudh to improve the administration. But, misrule continued there and the Nawab was under the assumption that the British would not annex Oudh because of his loyalty to them. In 1851, William Sleeman, Resident at Lucknow, reported on the "spectacle of human misery and careless misrule". But Sleeman was against the policy of annexing Oudh. After surveying the situation in Oudh, Dalhousie annexed it in 1856. Nawab Wajid Ali was granted a pension of 12 lakhs of rupees per year. The annexed territory came under the control of a Chief Commissioner.

Dalhousie's annexation of Oudh, the last one among his annexations, created great political danger. The annexation offended the Muslim elite. More dangerous was the effect on the British army's Indian troops, many of whom came from Oudh. They had occupied a privileged position before its annexation. Under the British Government they were treated as equals with the rest of the population. This is a loss of prestige for them. In these various ways, the annexation of Oudh contributed to the Mutiny of 1857.

## Domestic Reforms of Dalhousie

Dalhousie's territorial acquisition transformed the map of India. He was not only a conqueror but also a great administrator. The appointment of a Lieutenant-Governor to Bengal enabled Dalhousie concentrate on administration. His greatest achievement was the molding of the new provinces into a modern centralized state. For the newly acquired territories, he introduced the centralized control called "Non-Regulation System". Under this system a Commissioner was appointed for a newly acquired territory. Under military reforms Dalhousie shifted the headquarters of Bengal Artillery from Calcutta to Meerut. Simla was made the permanent headquarters of the army.

## Railways

The introduction railways in India inaugurated a new economic era. There were three major reasons for the British to take interest in its quick development. The first reason was commercial. The second main reason was administrative. The third reason was defense. At the time of revolt and disturbance, movement of the forces was much easier through railways. Lord Dalhousie's



contribution in the development of railways is worth commending. In 1853, he penned his Railway Minute formulating the future policy of railways in India. He started the “guarantee system” by which the railway companies were guaranteed a minimum interest of five percent on their investment. The government retained the right of buying the railway at the end of the period of contract. The first railway line connecting Bombay with Thane was opened in 1853. Railway lines connecting from Calcutta to the Raniganj coal-fields was opened in 1854 and from Madras to Arakkonam in 1856. *The first railway in the world was opened in 1825 in England.*

### Telegraph

Similarly, the use of Telegraph brought marvelous changes in communication system. In India, Lord Dalhousie’s contribution in this respect is commendable. In 1852, O’Shaughnessy was appointed the Superintendent of Telegraph Department. Main cities of the country viz., Calcutta, Peshawar, Bombay and Madras were telegraphically connected. About 4000 miles long Telegraph lines were laid before the departure of Dalhousie. During the 1857 Revolt, the system of telegraphic communication proved a boon for the English and the military value of Dalhousie’s creation was much realized at that time.

### Postal Reform

The foundation of modern postal system was laid down by Lord Dalhousie. A new Post Office Act was passed in 1854. Consequently, irrespective of the distance over which the letter was sent, a uniform rate of half an *anna* per post card was charged throughout India. Postage stamps were introduced for the first time.

### Education

Dalhousie had also evinced in the development of education. The educational Despatch of Sir Charles Wood (1854) was considered the “Intellectual Charter of India”. It provided an outline for the comprehensive scheme of education at primary, secondary and collegiate levels. Dalhousie fully accepted the views of Charles Wood and took steps to carry out the new scheme. Departments of Public Instructions were organized. The Universities of Calcutta, Bombay and Madras were founded in 1857.

### Public Works Department

Before the period of Dalhousie, the job of the Public Works Department was done by the Military Board. Dalhousie created a separate Public Works Department and allotted more funds for cutting canals and roads. The Upper Ganges Canal was completed in 1854. Many bridges were constructed. By modernizing the Public Works Department he laid the foundations of the engineering service in India.

### Estimate of Dalhousie

Dalhousie left India in 1856. The outbreak of Mutiny in the following year led to a severe criticism of his policy of annexation. Exhausted by his years of overwork in India, he fell ill and died in 1860. There is no doubt that Dalhousie was an able administrator and visionary. He increased the extent of British India and consolidated it. He inaugurated an era of progress on many sides. He was the father of Railways and Telegraphs. He introduced the process of modernization of India. Hence, he is hailed as “the maker of modern India”.

## Revenue Administration And Economic Policy Of The British

### Learning Objectives

Students will understand

1. The British agrarian policy.
2. Different Land Revenue Systems introduced by the British.
3. The Merits and demerits of the revenue administration.
4. British policy towards the handicrafts industry.
5. Causes for the decline of the Indian handicrafts.

### British Agrarian Policy

It is a well-known fact that India is primarily an agricultural country. The overwhelming majority of its people depend on agriculture for sustenance. If the crop is good, prosperity prevails otherwise it leads to famine and starvation.

Till the 18th century, there was a strong relation between agriculture and cottage industries in India. India was not only ahead in the field of agriculture than most other countries but it also held a prominent place in the world in the field of handicraft production. The British destroyed handicraft industry in the country while unleashing far-reaching changes in the country’s agrarian structure by introducing new systems of land tenures and policies of revenue administration. India’s national income, foreign trade, industrial expansion and almost every other dominion of economic activity, depended on the country’s agriculture. The British policies revolved around getting maximum income from land without caring much about Indian interests of the cultivators. They abandoned the age-old system of revenue administration and adopted in their place a ruthless policy of revenue collection. After their advent, the British principally adopted three types of land tenures. Roughly 19 per cent of the total area under the British rule, i.e., Bengal, Bihar, Banaras, division of the Northern Western Provinces and northern Karnatak, were brought under the **Zamindari System** or the **Permanent Settlement**. The second revenue system, called the **Mahalwari Settlement**, was introduced in about 30 per cent of the total area under British rule i.e., in major parts of the North Western Provinces, Central Provinces and the Punjab with some variations. **The Ryotwari System** covered about 51 per cent of the area under British rule comprising part of the Bombay and Madras Presidencies, Assam and certain other parts of British India.

### The Permanent Settlement

Lord Cornwallis’ most conspicuous administrative measure was the Permanent Land Revenue Settlement of Bengal, which was extended to the provinces of Bihar and Orissa. It is appropriate to recall that Warren Hastings introduced the annual lease system of auctioning the land to the highest bidder. It created chaos in the revenue administration.

Cornwallis at the time of his appointment was instructed by the Directors to find a satisfactory and permanent solution to the problems of the land revenue system in order to protect the interests of both the Company and the cultivators. It obliged the Governor-General to make a thorough enquiry into the usages, tenures and rents prevalent in Bengal. The whole problem occupied Lord

Cornwallis for over three years and after a prolonged discussion with his colleagues like Sir John Shore and

James Grant he decided to abolish the annual lease system and introduce a decennial (Ten years) settlement which was subsequently declared to be continuous. The main features of the Permanent Settlement were as follows:

- (i) The zamindars of Bengal were recognised as the owners of land as long as they paid the revenue to the East India Company regularly.
- (ii) The amount of revenue that the zamindars had to pay to the Company was firmly fixed and would not be raised under any circumstances. In other words the Government of the East India Company got 89% leaving the rest to the zamindars.
- (iii) The ryots became tenants since they were considered the tillers of the soil.
- (iv) This settlement took away the administrative and judicial functions of the zamindars.

The Permanent Settlement of Cornwallis was bitterly criticised on the point that it was adopted with 'undue haste'. The flagrant defect of this arrangement was that no attempt was made ever either to survey the lands or to assess their value. The assessment was made roughly on the basis of accounts of previous collections and it was done in an irregular manner. The effects of this system both on the zamindars and ryots were disastrous. As the revenue fixed by the system was too high, many zamindars defaulted on payments. Their property was seized and distress sales were conducted leading to their ruin. The rich zamindars who led luxurious lives left their villages and migrated into towns. They entrusted their rent collection to agents who exacted all kinds of illegal taxes besides the legal ones from the ryots. This had resulted in a great deal of misery amongst the peasants and farmers. Therefore Lord Cornwallis' idea of building a system of benevolent land-lordism failed. Baden Powell remarks, "The zamindars as a class did nothing for the tenants". Though initially the Company gained financially, in the long run the Company suffered financial loss because land productivity was high, income from it was meagre since it was a fixed sum. It should be noted that in pre-British period a share on the crop was fixed as land tax.

Nevertheless, this system proved to be a great boon to the zamindars and to the government of Bengal. It formed a regular income and stabilised the government of the Company. The zamindars prospered at the cost of the welfare of the tenants.

### **Ryotwari Settlement**

The Ryotwari settlement was introduced mainly in Madras, Berar, Bombay and Assam. Sir Thomas Munro introduced this system in the Madras Presidency. Under this settlement, the peasant was recognised as the proprietor of land. There was no intermediary like a Zamindar between the peasant and the government. So long as he paid the revenue in time, the peasant was not evicted from the land. Besides, the land revenue was fixed for a period from 20 to 40 years at a time. Every peasant was held personally responsible for direct payment of land revenue to the government. However, in the end, this system also failed. Under this settlement it was certainly not possible to collect revenue in a systematic manner. The revenue officials indulged in harsh measures for non payment or delayed payment.

### **Mahalwari Settlement**

In 1833, the Mahalwari settlement was introduced in the Punjab, the Central Provinces and parts of North Western Provinces. Under this system the basic unit of revenue settlement was the village or the Mahal. As the

village lands belonged jointly to the village community, the responsibility of paying the revenue rested with the entire Mahal or the village community. So the entire land of the village was measured at the time of fixing the revenue.

Though the Mahalwari system eliminated middlemen between the government and the village community and brought about improvement in irrigation facility, yet its benefit was largely enjoyed by the government.

### **British Policy towards Indian Handicrafts**

The European companies began arriving on the Indian soil from 16th century. During this period, they were constantly engaged in fierce competition to establish their supremacy and monopoly over Indian trade. Not surprisingly, therefore, initial objective of the English East India Company was to have flourishing trade with India. Later, this objective was enlarged to acquire a monopoly over this trade and obtain its entire profit. Although the trade monopoly thus acquired by the Company in India was ended by the Charter Act of 1833, yet the British Policy of exploiting the resources of India continued unabated. In this respect, the nature of the British rule was different from the earlier rulers. As far as the traditional handicraft industry and the production of objects of art were concerned, India was already far ahead of other countries in the world. The textiles were the most important among the Indian industries. Its cotton, silk and woolen products were sought after all over the world. Particularly, the muslin of Dacca, carpets of Lahore, shawls of Kashmir, and the embroidery works of Banaras were very famous. Ivory goods, wood works and jewellery were other widely sought after Indian commodities.

Apart from Dacca, which was highly famous for its muslins, the other important centres of textile production were Krishnanagar, Chanderi, Ami and Banaras. *Dhotis* and *dupattas* of Ahmedabad, Chikan of Lucknow, and silk borders of Nagpur had earned a worldwide fame. For their silk products some small towns of Bengal besides, Malda and Murshidabad were very famous. Similarly, Kashmir, Punjab and western Rajasthan were famous for their woolen garments.

Besides textiles, India was also known widely for its shipping, leather and metal industries. Indian fame as an industrial economy rested on cutting and polishing of marble and other precious stones and carving of ivory and sandalwood. Moradabad and Banaras were famous for brass, copper, bronze utensils. Nasik, Poona, Hyderabad and Tanjore were famous for other metal works. Kutch, Sind and Punjab were known for manufacturing arms. Kolhapur, Satara, Gorakhpur, Agra, Chittor and Palaghat had likewise earned a reputation for their glass industries. Making of gold, silver and diamond jewellery was another important industrial activity in which many places in India specialized. These entire handicrafts industry indicated a vibrant economy in India.

Despite enjoying such fame in the world, the Indian handicraft industry had begun to decline by the beginning of the 18th century. There were many reasons for it. First, the policies followed by the English East India Company proved to be highly detrimental to the Indian handicrafts industry. The Indian market was flooded with the cheap finished goods from Britain. It resulted in a steep decline in the sale of Indian products both within and outside of the country. In 1769, the Company encouraged the cultivation of raw silk in Bengal while imposing service restrictions on the sale of

its finished products. In 1813 strategies were devised by the Company to enhance the consumption of finished goods from Britain. In this respect the tariff and octroi policies were suitably modified to suit the British commercial interests. To cite an example, in 1835 only a minimal import of British duty of 2.5 per cent was imposed on the import of British manufactured cotton cloth whereas a very high 15 per cent export duty was charged on Indian cotton textiles as per the new maritime regulations. Moreover, goods from England could only be brought by the English cargo ships. As a result of all these policies, the Indian textiles could not enter the British market, whereas the Indian market was flooded with British goods. Thus, with the rise of British paramountcy in India, the process of decline in the power and status of Indian rulers had set in. Thus, the demands for the domestic luxury goods like royal attires, armory and objects of art by the Indian royalty also reduced drastically. So, with the disappearance of the traditional dynasties, their nobility also passed into oblivion. This led to a sharp decline in the demand for traditional luxury goods. Besides, the Industrial revolution led to the invention of new machinery in Europe. Power looms replaced handlooms. In India also the advent of machines led to the decline of handicraft as now the machine-made products were available at cheaper rate and more goods could be produced in much lesser time. Finally, the new communication and transport facilities brought about a revolution in public life. Earlier, goods used to be transported either by bullock carts or by ships. Thus, during the rainy season, it was not always convenient to carry on with the normal transportation. But now conditions were changed with the introduction of railways and steamer services. Concrete roads were laid to connect the country's agricultural hinterland. The import of goods from England also increased with the simultaneous increase in exports of raw materials from India, leading to massive loss of jobs among Indian artisans and craftsman who lost their only means to livelihood.

## Chapter 8 Educational And Social Reforms

### *Learning Objectives*

#### *Students will understand*

1. The language and educational policies of the British.
2. Debates over the introduction of English education in India.
3. Introduction of social reforms in India.
4. Legislation on women.
5. Struggle against the Caste system and the legislation relating to abolition of caste discrimination.

### **Language and Education Policy**

Initially, the East India Company did not evince any particular interest in matters of education. Although the British had captured Bengal in 1757, yet the responsibility of imparting education remained only in Indian hands. The study of ancient texts written in Arabic, Persian and Sanskrit still continued. In 1781, Warren Hastings established a Madrasa in Calcutta to encourage the study of Muslim laws along with Arabic and Persian languages.

A decade later in 1791 due to the sincere efforts of the British resident, Jonathan Duncan, a Sanskrit College was established to promote the study of Hindu laws and

philosophy in Banaras. Therefore, it must be contended that during the first three decades of the 19th century, the development of education took place only through the traditional institutions.

It is apparent from the government and Church records that the state of oriental learning at the time of the establishment of the Company's rule in Bengal, there were about 80,000 traditional institutions of learning in Bengal alone, which means that there was at least one institution for every four hundred people in that province. Different educational surveys of Madras, Bombay and Punjab also demonstrate similar facts. There was at least one school in every village of India at that time.

The East India Company began to adopt a dual policy in the sphere of education. It discouraged the prevalent system of oriental education and gave importance to western education and English language. The Charter Act of 1813 adopted a provision to spend one lakh rupees per annum for the spread of education in India. Although there was a prolonged debate pertaining to education during the course of a general discussion on the Act of 1813 in the British Parliament, yet the matter continued to generate debate for the next 20 years. Consequently, not even a single penny out of the allocated funds could be spent on education. The contemporary British scholars were divided into two groups on the issue of development of education in India. One group, called the **Orientalists**, advocated the promotion of oriental subjects through Indian languages. The other group, called the **Anglicists**, argued the cause of western sciences and literature in the medium of English language.

In 1829, after assuming the office of the Governor-General of India, Lord William Bentinck, emphasized on the medium of English language in Indian education. In the beginning of 1835, the 10 members of the General Committee of Public Instruction were clearly divided into two equal groups. Five members including the Chairman of the committee Lord Macaulay were in favour of adopting English as medium of public instruction whereas the other five were in favour of oriental languages.

The stalemate continued till 2 February 1835 when the Chairman of the committee, **Lord Macaulay** announced his famous Minute advocating the Anglicist point of view. Consequently, despite fierce opposition from all quarters, Bentinck got the resolution passed on 7 March 1835 which declared that henceforth, government funds would be utilized for the promotion of western literature and science through the medium of English language.

In 1854, **Sir Charles Wood** sent a comprehensive dispatch as a grand plan on education. The establishment of departments of public instructions in five provinces and introduction of the pattern of grants in aid to encourage private participation in the field of education were recommended. Besides, the dispatch also laid emphasis on the establishment of schools for technical education, teacher and women education. Over and above all these, the dispatch recommended the establishment of one University each in Calcutta, Bombay and Madras, on the model of the London University. Consequently, within the next few years, the Indian education became rapidly westernized.

### **Social Policies and Legislation**

In the beginning, the British interest was limited to trade and earning profits from economic exploitation. Therefore, they did not evince any interest in taking the



issue of social or religious reforms. They were apprehensive of interfering with the social and religious customs and institutions of the Indians because of the fear that they might lose trade advantage. Thus, they adopted the policy of extreme precaution and indifference towards social issues in India. The one reason why they indulged in criticizing the customs and traditions of India was to generate a feeling of inferiority complex among the Indians.

However, in the mid-19th century the social and religious movements, launched in India, attracted the attention of the Company's administration towards the country's social evils. The propaganda carried out by the Christian missionaries also stirred the minds of the educated Indians. Western thought and education and views expressed in different newspapers and magazines had their own impact. Some of the British administrators like Lord William Bentinck had evinced personal interest in the matter. There were primarily two areas in which laws were enacted, laws pertaining to women emancipation and the caste system.

### Social Laws Concerning Women

The condition of women, by the time the British established their rule, was not encouraging. Several evil practices such as the practice of *Sati*, the Purdah system, child marriage, female infanticide, bride price and polygamy had made their life quite miserable. The place of women had come to be confined to the four walls of her home. The doors of education had been shut for them. From economic point of view also her status was miserable. There was no social and economic equality between a man and woman. A Hindu woman was not entitled to inherit any property. Thus, by and large, she was completely dependent on men. During the 19th and 20th centuries some laws were enacted with the sincere efforts of social reformers, humanists and some British administrators to improve the condition of women in Indian society. The first effort in this direction was the enactment of law against the practice of Sati during the administration of Lord William Bentinck.

### Female Infanticide

Female infanticide was another inhuman practice afflicting the 19th century Indian society. It was particularly in vogue in Rajputana, Punjab and the North Western Provinces. Colonel Todd, Johnson Duncan, Malcolm and other British administrators have discussed about this evil custom in detail. Factors such as family pride, the fear of not finding a suitable match for the girl child and the hesitation to bend before the prospective in-laws were some of the major reasons responsible for this practice. Therefore, immediately after birth, the female infants were being killed either by feeding them with opium or by strangulating or by purposely neglecting them. Some laws were enacted against this practice in 1795, 1802 and 1804 and then in 1870. However, the practice could not be completely eradicated only through legal measures. Gradually, this evil practice came to be done away through education and public opinion.

### Widow Remarriage

There are many historical evidences to suggest that widow remarriage enjoyed social sanction during ancient period in India. In course of time the practice ceased to prevail increasing the number of widows to lakhs during the 19th century. Therefore, it became incumbent on the part of the social reformers to make sincere efforts to popularize widow remarriage by

writing in newspapers and contemporary journals. Prominent among these reformers were Raja Rammohan Roy and Iswar Chandra Vidyasagar. They carried out large scale campaigns in this regard mainly through books, pamphlets and petitions with scores of signatures. In July 1856, J.P. Grant, a member of the Governor-General's Council finally tabled a bill in support of the widow remarriage, which was passed on 13 July 1856 and came to be called the **Widow Remarriage Act, 1856**.

### Child Marriage

The practice of child marriage was another social stigma for the women. In November 1870, the Indian Reforms Association was started with the efforts of Keshav Chandra Sen. A journal called *Mahapap Bal Vivah* (Child marriage: The Cardinal Sin) was also launched with the efforts of B.M. Malabari to fight against child marriage. In 1846, the minimum marriageable age for a girl was only 10 years. In 1891, through the enactment of the Age of Consent Act, this was raised to 12 years. In 1930, through the **Sharda Act**, the minimum age was raised to 14 years. After independence, the limit was raised to 18 years in 1978.

### Purdah System

Similarly, voices were raised against the practice of Purdah during the 19th and 20th century. The condition of women among the peasantry was relatively better in this respect. Purdah was not so much prevalent in Southern India. Through the large scale participation of women in the national freedom movement, the system disappeared without any specific legislative measure taken against it.

### Struggle against the Caste System and the related Legislation

Next to the issue of women emancipation, the caste system became the second most important issue of social reforms. In fact, the system of caste had become the bane of Indian society.

The caste system was primarily based on the fourfold division of society viz. Brahmins, Kshatriya, Vaishyas and Shudras. On account of their degradation in their social status, the Shudras were subjected to all kinds of social discrimination. In the beginning of the 19th century the castes of India had been split into innumerable subcastes on the basis of birth. In the meantime, a new social consciousness also dawned among the Indians. Abolition of untouchability became a major issue of the 19th century social and religious reform movements in the country. Mahatma Gandhi made the removal of untouchability a part of his constructive programme. He brought out a paper, *The Harijan*, and also organised the Harijan Sevak Sangh. Dr. Bhimrao Ambedkar dedicated his entire life for the welfare of the downtrodden. In Bombay, he formed a Bahiskrit Hitkarini Sabha in July 1924 for this purpose. Later, he also organised the Akhil Bharatiya Dalit Sabha to fight against caste oppression. **Jyotirao Phule** in Western India and Shri Narayana Guru in Kerala respectively established the Satya Sadhak Samaj and the Shri Narayana Dharma Partipalana Yogam to include self-esteem among the downtrodden.

In the Madras Presidency also the beginning of 20th century witnessed the rise of **Self-respect Movement of Periyar E.V.R.** In order to eradicate this evil practice many other individual and institutional efforts were also made. These movements were directed mainly in removing the disabilities suffered

by Harijans in regard to drawing of water from public wells, getting entry into temples and admission into schools.

## Chapter 9 The Great Revolt Of 1857

### Learning Objectives

1. The nature of the Great Revolt of 1857.
2. The underlying causes of the Revolt.
3. The immediate cause of the outbreak of Revolt.
4. The course of the Revolt.
5. Causes for the failure of the Revolt.
6. Effects of the Revolt.

The 1857 Revolt sowed the seeds of Indian nationalism, which lay dormant in the subconscious of the Indian people. It started the movement which was a continuous struggle against the British rule till 1947. Hence, the nature, character and causes of this Great Revolt of 1857 should be studied in order to understand the subsequent events.

### Nature of the Revolt

The historical writings of the British scholars underplayed the character of the Revolt of 1857. Sir John Lawrence was of the opinion that the Revolt was purely a military outbreak, and not a conspiracy to overthrow British rule. On the other hand the Revolt of 1857 is hailed by the Indian scholars, especially by Vir Savarkar as the First War of Indian Independence. Two distinguished Indian historians, R.C. Majumdar and S.N. Sen, have analysed the Revolt of 1857 in depth. The two scholars differ in their opinion. S.N. Sen believes that the 1857 Revolt was part of the struggle for Indian independence. R.C. Majumdar maintains that the outbreaks before 1857, whether civil or military, were “a series of isolated incidents” ultimately culminated in the Great Revolt of 1857.

### Causes of the Revolt

#### Political Causes

The discontent and disaffection manifested in the form of revolts against the British Government were not confined to the ruling chiefs and royal families alone. On the contrary, the British rule was disliked by the people at large in any region when it was newly introduced. Anti-British feelings were particularly strong in those regions like Burma, Assam, Coorg, Sind, and the Punjab which were unjustly annexed to the British Empire. The Doctrine of Lapse, particularly its practical application by Lord Dalhousie, produced grave discontent and alarm among the native princes, who were directly affected.

#### Economic Causes

The huge drain of wealth, the destruction of its industry and increasing land revenue had become the common features of the latter half of the eighteenth century. The East India Company, after attaining political power, used it to fund the growth of British trade and commerce at the cost of Indians. The British damaged the Indian trade and manufacture by imposing a high tariff in Britain against Indian goods, and by encouraging all means the import of British goods to India. In England the ruin of the old handloom weavers was accompanied by the growth of the machine industry. But in India the ruin of the millions of artisans and craftsmen was not accompanied by any alternative growth of new industrial forms. A new plantation system introduced in the year 1833

resulted in incalculable misery for the Indian peasants. This was the result of permitting Englishmen to acquire land plantations in India. The hard hit were the peasants on the indigo plantations in Bengal and Bihar.

### Social Causes

The Englishmen showed an arrogant attitude towards the Indians. Indiscriminate assaults on Indians by Englishmen became quite common. Also, a general alarm was raised among the Hindus and Muslims by the activities of the Christian missionaries. The educational institutions established by the missionaries inculcated western education and culture in the place of oriental learning. The native population felt that were losing their social identity.

### Military causes

Discontent against the British Raj was widely prevalent among the Indian soldiers in the British army. The Indian sepoys in the British Indian army nursed a sense of strong resentment at their low salary and poor prospects of promotion. The British military officers at times showed least respect to the social values and religious sentiments of Indian sepoys in the army. Thus, although generally faithful to their masters, the sepoys were provoked to revolt. The Vellore mutiny of 1806, a precursor to the 1857 Great Revolt, was the outcome of such tendencies on the part of the military authorities. Another important cause of the sepoys' dissatisfaction was the order that abolished the foreign allowance or *batta* when they served in foreign territories. Thus the discontent was widespread and there was an undercurrent before the volcanic situation of 1857. All that needed was only a spark to set it a fire.

### The Beginning of the Revolt

The 1857 Revolt was sparked off by the episode of the greased cartridges. The new Enfield rifle had been introduced for the first time in the Indian army. Its cartridges had a greased paper cover whose end had to be bitten off before the cartridge was loaded into the rifle. The grease was composed of fat taken from beef and pig. The religious feelings of the Hindu and Muslim sepoys were terribly wounded. The sepoys believed that the government was deliberately trying to destroy their religious and cultural identity. Hence they raised the banner of revolt.

The events that led to the Revolt began on 29 March 1857 at **Barrackpore. Mangal Pandey** (a sepoy) refused to use the greased cartridges and single-handedly attacked and killed his officer. Mangal Pandey was hanged. The regiment to which he belonged was disbanded and sepoys guilty of rebellion punished. The British instead of diffusing the explosive situation, paved the way for a mighty crisis by the above act. A chain reaction was set in motion. At Meerut in May 1857, 85 sepoys of the 3rd Cavalry regiment were sentenced to long terms of imprisonment for refusing to use the greased cartridges. Therefore, on 10 May the sepoys broke out in open rebellion, shot their officers, released their fellow sepoys and headed towards Delhi. General Hewitt, the officer commanding at Meerut was helpless to prevent the army's march.

Next morning the rebellious army reached Delhi. The city of Delhi fell into the hands of the rebellious soldiers on 12 May 1857. Lieutenant Willtashby, the officer in charge of Delhi could not prevent the mutineers. Soon, the mutineers proclaimed the aged nominal king, Bahadur Shah II of the Mughal dynasty as the Emperor of India. Very soon the rebellion spread throughout northern and central India at Lucknow, Allahabad,

Kanpur, Banares, in parts of Bihar, Jhansi and other places.

The leadership at Delhi was nominally in the hands of Bahadur Shah, but the real control was exercised by General Bakht Khan. On the side of the British the combined effort of Nicholson, Wilson, Baird Smith and Neville Chamberlain enabled the recapture Delhi by September 1857. In Delhi, Emperor Bahadur Shah II was arrested and deported to Rangoon, where he remained in exile till he died in 1862.

### Kanpur

At Kanpur the revolt was led by Nana **Saheb**, the adopted son of Baji Rao II, the last Peshwa. Nana Saheb expelled the English from Kanpur with the help of the sepoys and proclaimed himself the Peshwa. Nana Saheb in his efforts against the British was ably supported by two of his lieutenants. One was Tantia Tope, the other was Azimullah. Sir Hugh Wheeler the commander of the British garrison at Kanpur surrendered on the 27 June 1857. But, soon Kanpur was recaptured by the British commander Sir Colin Campbell.

### Lucknow

The principal person responsible for the revolt in Lucknow was the Begum of Oudh. With the assistance of the sepoys, the zamindars and peasants, the Begum organised an all out attack on the British. Henry Lawrence, the chief commissioner tried to defend the British. Lawrence was killed in a bomb blast during the fight. The final relief for the British forces in Lucknow came in the form of Sir Colin Campbell, who suppressed the revolt.

### Jhansi

Rani Lakshmi Bai of Jhansi, the widowed queen of Gangadhar Rao played a heroic role in this revolt. Rani Lakshmi Bai was affected by Dalhousie's Doctrine of Lapse, was joined by Tantia Tope. The combined efforts of Rani and Tantia Tope saw the capture of Gwalior. Meanwhile, Sir Hugh Rose defeated Tantia Tope and stormed Jhansi on 3 April 1858. He then captured Gwalior. The Rani of Jhansi died a soldier's death on 17 June 1858. Tantia Tope was captured and hanged on charges of rebellion and murder in the massacre of Kanpur.

### Bihar

Kunwar Singh, a ruined and discontented zamindar of Jagdishpur near Oudh, was the chief organiser of the revolt in Bihar. He fought the British in Bihar. Kunwar Singh sustained a fatal wound in the battle and died on 27 April 1858 at Jagdishpur. Ultimately the 1857 Revolt came to an end with the victory of the British. Viceroy Canning proclaimed peace throughout India.

### Causes for the Failure of the Revolt

The first and foremost cause was that the Revolt failed to embrace the whole of India. Different sections of society such as moneylenders, merchants and modern educated Indians were actually against the Revolt. The lack of interest shown by the intellectuals in the movement was a serious setback. The resources of the British Empire were far superior to those of the rebels. Similarly, the insurgents lacked a carefully concerted general plan or a strong central organisation to plan the movements of the army and oversee their strategy.

On the other hand, the British possessed better equipment. In addition, the British were aided by new

scientific inventions such as the telegraph system and postal communications. This enabled the British to keep in touch with all parts of the country and to manoeuvre their troops according to their needs.

All the said factors combined to cause the defeat of the rebels of the 1857 Revolt and ended in the victory for the British.

### Significance and Effects of the Mutiny

The Revolt of 1857 though completely suppressed had shaken the very foundations of British rule in India, for the simple reason that the Revolt exhibited the popular character. It brought together the disgruntled sections of society to rise against the British rule. The common people rose up in arms often fighting with spears and axes, bows and arrows, lathis and scythes, and crude mulkets. However, this civilian revolt was not universal but sporadic and inconsistent. Nevertheless, it added a new dimension to the character of the 1857 Revolt. Another significant aspect of the 1857 Revolt was the Hindu-Muslim unity.

As far as the effects of the Revolt are concerned, it brought about fundamental changes in the character of Indian administration which was transferred from the East India Company to the Crown by the Queen's Proclamation of 1 November, 1858. At the same time the Governor-General received the new title of Viceroy. Lord Canning had the unique opportunity to become the Governor-General as well as the first Viceroy according to the Act of 1858.

Lord Canning proclaimed the new Government at Allahabad on 1 November 1858 in accordance with the Queen's Proclamation. The latter has been called the Magna Carta of the Indian people; it disclaimed any extension of territory, promised religious toleration, guaranteed the rights of Indian princes and pledged equal treatment to her subjects, Indians and Europeans. The Revolt of 1857 ended an era and sowed the seeds of a new one. The year 1857 is a great divide between the two landmarks in Indian history. One was that of British paramountcy in the first half, and the other is that of the growth of Indian nationalism in the second half of the nineteenth century.

## Chapter 10 British India After 1858:

### Learning Objectives

*Students will acquire knowledge about*

1. Lord Lytton's policies on famine, the Indian Press and trade.
2. Second Afghan War.
3. Lord Ripon's reforms in the field of education and Local- Self Government.
4. The Ilbert Bill controversy and Ripon's attitude towards Indians.

5. Lord Curzon's reforms and the Partition of Bengal.

After the 1857 Revolt, the responsibility of ruling India was directly assumed by the British Crown. Lord Canning became the first Viceroy of India in 1858. The Government of India Act of 1858 and the Queen's Proclamation in the same year signify this change in the Indian administration. The Queen's Proclamation remained the basis of the British policy in India for more than 60 years. The administrations of Lord Lytton, Lord Ripon and Lord Curzon were important during this period.

### Lord Lytton (1876-1880)

Lord Lytton was an experienced diplomat and a man of



striking ability and brilliance. The British Prime Minister, Disraeli appointed him as the Viceroy of India. The prevailing famine and the political disturbances in the North West Frontier caused a great worry to the British at that time.

### Famine Policy

The famine of 1876-78 had resulted from the failure of two monsoons. It covered an area of two lakh fifty thousand square miles and affected fifty eight million people. The worst affected areas were Madras, Mysore, Hyderabad, Bombay, Central India and the Punjab. It took a toll of five million lives in a single year. The outbreak of cholera and fever added to the misery of the suffering population. Lytton's Government failed miserably to tackle the situation. The government's relief measures seemed to be inadequate. The first Famine Commission (1878-80) under Sir Richard Strachey was appointed and it made many commendable recommendations. They include provision of funds for famine relief and construction work in the annual budget. The Famine Code came into existence in 1883.

### The Vernacular Press Act and the Arms Act (1878)

In 1878, the **Vernacular Press Act** was passed. This Act empowered a Magistrate to secure an undertaking from the editor, publisher and printer of a vernacular newspaper that nothing would be published against the English Government. The equipment of the press could be seized if the offence was committed. This Act crushed the freedom of the Indian press. This created adverse public opinion against the British Government. In the same year, the **Arms Act** was passed. This Act prevented the Indians to keep arms without appropriate license. Its violation would be a criminal offence. The Europeans and the Anglo- Indians were exempted from the operation of these legislations.

### Other Reforms

Lord Lytton introduced uniform salt tax throughout British India. He also abolished many import duties and supported the Free Trade Policy. This had seriously affected the Indian economic interest. The system of decentralisation of finance that had begun in the time of Lord Mayo was continued during the time of Lord Lytton. The provincial governments were empowered with some control over the expenditure of all provincial matters like land-revenue, excise, stamps, law and justice. Lytton wanted to encourage the provinces in collecting the revenue and thereby strengthen the financial power and position of the provinces. In 1878, the Statutory Civil Service was established exclusively for Indians but this was abolished later.

### Lytton & 2nd Afghan War (1878-80)

The Afghan policy of the British was based on the assumed threat of Russian invasion of India. The first Afghan War (1838-42) proved to be a disastrous one for the British in India. When Lord Lytton was appointed the Viceroy of India, he was instructed by the home government to follow a forward policy. The Russian attempt to send a mission to Afghanistan was the main cause of the Second Afghan War.

Soon after the outbreak of the war in 1878, the British troops captured the territory between Kabul and Kandahar. The ruler of Afghanistan, Sher Ali fled from his country and died in 1879. His son Yakub Khan became the ruler and the British concluded the **Treaty of Gandamak** with him. A British Resident was sent to

Kabul but soon he was murdered along with other British officers by the Afghan rebels. Although the British troops were able to recapture Kabul, the difficulties in holding it increased due to the activities of the rebels. Suddenly in 1880, Lytton was forced to resign by the new government in England.

Lytton's Afghan policy was severely criticised because he was responsible for the murder of the British officers including the Resident in Kabul. During his administration, millions died due to famine. The Vernacular Press Act undermined his credit.

### Lord Ripon (1880-84)

Lord Ripon was a staunch Liberal democrat with faith in selfgovernment. He was appointed as the Viceroy of India by Gladstone, the Liberal Party Prime Minister of England. Ripon was instructed to reverse the Afghan policy of Lytton. Therefore, as soon as he came to India, peace was made with Afghanistan without affecting the British prestige. The proposal of appointing a Resident in Kabul was dropped. He was also responsible for the rendition of Mysore to its Hindu ruler. Moreover, he repealed the Vernacular Press Act and earned much popularity among Indians. Then, he devoted himself to task of liberalising the Indian administration.

### Introduction of Local Self-Government (1882)

Ripon believed that self-government is the highest and noblest principles of politics. Therefore, Ripon helped the growth of local bodies like the Municipal Committees in towns and the local boards in taluks and villages. The powers of municipalities were increased. Their chairmen were to be non-officials. They were entrusted the care of local amenities, sanitation, drainage and water-supply and also primary education. District and taluk boards were created. It was insisted that the majority of the members of these boards should be elected non-officials. The local bodies were given executive powers with financial resources of their own. It was perhaps the desire of Ripon that power in India should be gradually transferred to the educated Indians. He also insisted on the election of local bodies as against selection by the government. In all these measures, Ripon's concern was not so much for efficiency in administration. Instead, Ripon diffused the administration and brought the government closer to the people. This was his most important achievement. It was Ripon who laid the foundations of the system which functions today.

Like Lord William Bentinck, Lord Ripon was a champion of education of the Indians. Ripon wanted to review the working of the educational system on the basis of the recommendations of the Wood's Despatch. For further improvement of the system Ripon appointed a Commission in 1882 under the chairmanship of Sir William Hunter. The Commission came to be known as the Hunter Commission. The Commission recommended for the expansion and improvement of the elementary education of the masses. The Commission suggested two channels for the secondary education—one was literary education leading up to the Entrance Examination of the university and the other preparing the students for a vocational career. The Commission noted the poor status of women education. It encouraged the local bodies in the villages and towns to manage the elementary education. This had resulted in the extraordinary rise in the number of educational institutions in India.

### First Factory Act (1881)

Lord Ripon introduced the Factory Act of 1881 to improve the service condition of the factory workers in India. The Act banned the appointment of children below the age of seven in factories. It reduced the working hours for children. It made compulsory for all dangerous machines in the factories to be properly fenced to ensure security to the workers.

### Ilbert Bill Agitation (1884)

Lord Ripon wanted to remove two kinds of law that had been prevalent in India. According to the system of law, a European could be tried only by a European Judge or a European Magistrate. The disqualification was unjust and it was sought to cast a needless discredit and dishonour upon the Indian-born members of the judiciary. C.P. Ilbert, Law Member, introduced a bill in 1883 to abolish this discrimination in judiciary. But Europeans opposed this Bill strongly. They even raised a fund of one lakh fifty thousand rupees and established an organisation called the Defence Association. They also suggested that it was better to end the English rule in India than to allow the English to be subjected to the Indian Judges and Magistrates. The press in England joined the issue. Hence, Ripon amended the bill to satisfy the English in India and England.

The Ilbert Bill controversy helped the cause of Indian nationalism. The Ilbert Bill Controversy is a high watermark in the history of Indian National Movement. Ripon was totally disillusioned and heartbroken and he tendered his resignation and left for England. The immediate result of this awakening of India was the birth of the Indian National Congress in 1885, the very next year of Ripon's departure.

### Estimate of Lord Ripon

Lord Ripon was the most popular Viceroy that England ever sent to India. The Indians by and large hailed him as "Ripon the Good", because he was the only Viceroy who handled the Indian problems with compassion and sympathy. His attempt to remove racial distinction in the judiciary, the repeal of the Vernacular Press Act, the rendition of Mysore and the introduction of the Local-Self Government increased his popularity among Indians. His resignation was deeply regretted by Indians who cherished his memory with gratitude.

### Lord Curzon (1899-1905)

Lord Curzon occupies a high place among the rulers of British India like Lord Wellesley and Lord Dalhousie. He was a thorough imperialist. In order to make the administration efficient, Lord Curzon overhauled the entire administrative machinery. His internal administration may be studied under the following heads.

Curzon took a serious view of the fall in the standard of education and discipline in the educational institutions. In his view the universities had degenerated into factories for producing political revolutionaries. To set the educational system in order, he instituted in 1902, a **Universities Commission** to go into the entire question of university education in the country. On the basis of the findings and recommendations of the Commission, Curzon brought in the Indian Universities Act of 1904, which brought all the universities in India under the control of the government.

### Police and Military Reforms

Curzon believed in efficiency and discipline. He instituted a Police Commission in 1902 under the chairmanship of **Sir Andrew Frazer**. Curzon accepted

all the recommendations and implemented them. He set up training schools for both the officers and the constables and introduced provincial police service. As for the remodeling of the army, it was by and large done by Lord Kitchener, the Commander-in-Chief in India in Curzon's time.

### Calcutta Corporation Act (1899)

The Viceroy brought in a new legislative measure namely the Calcutta Corporation Act in 1899 by which the strength of the elected members was reduced and that of the official members increased. Curzon gave more representations to the English people as against the Indians in the Calcutta Corporation. There was strong resentment by the Indian members against Curzon's anti-people measures.

### Preservation of Archaeological objects

Curzon had a passion for preserving the ancient monuments of historical importance in India. No Viceroy in India before or after him took such a keen interest in archaeological objects. He passed a law called the Ancient Monuments Act, 1904 which made it obligatory on the part of the government and local authorities to preserve the monuments of archaeological importance and their destruction an offence.

### Partition of Bengal, 1905

The Partition of Bengal into two provinces was effected on 4 July 1905. The new province of Eastern Bengal and Assam included the whole of Assam and the Dacca, Rajshahi and Chittagong divisions of Bengal with headquarters at Dacca. Though Curzon justified his action on administrative lines, partition divided the Hindus and Muslims in Bengal. This led to the anti-partition agitation all over the country. This had also intensified the National Movement.

### Estimate of Lord Curzon

Lord Curzon assumed his office, when he was forty years old. All his reform measures were preceded by an expert Commission and its recommendations. He made a serious study of the Indian problems in all their aspects. At the beginning Curzon earned the popularity and admiration of the Indian people. He lost the popularity by the act of Partition of Bengal.

## Chapter 11 Socio-Religious Reform Movements

*Students will come to know*

1. The Brahmo Samaj and its services.
2. The reforms of Arya Samaj, Ramakrishna Mission and similar organizations.
3. The services rendered by social reformers like Raja Rammohan Roy, Swami Dayanand Saraswathi and Vivekananda.
4. Reform Movements among the Muslims in India.
5. Sikh and Parsi reform movements.
6. Socio-religious reforms in Tamil Nadu led by Saint Ramalinga and Vaikunda swamikal.

In the history of modern India, the socio-religious reforms occupy a significant place. Social reformers like Raja Rammohan Roy, Swami Dayanand Sarawathi and Swami Vivekananda were responsible for the social and cultural awakening in India. The spread of liberal ideas of the west provided further stimulus for the emergence of reform movements. These movements introduced important changes in social and religious life of the people of India.

## Raja Rammohan Roy and the Brahmo Samaj

Raja Rammohan Roy established the **Brahmo Samaj** at Calcutta in 1828 in order to purify Hinduism and to preach **monotheism**. He is considered as the first 'modern man of India'. He was a pioneer of socio-religious reform movements in modern India. Born in 1772 in the Hooghly district of Bengal, he inculcated a brilliant freedom of thought and rationality. He studied *the Bible* as well as Hindu and Muslim religious texts. He had excellent command over many languages including English, Sanskrit, Persian, Arabic, French, Latin, Greek and Hebrew.

In 1815, he established the **Atmiya Sabha**. Later, it was developed into the Brahmo Sabha in August 1828. Through this organisation, he preached that there is only one God. He combined the teachings of the *Upanishads*, the *Bible* and the *Koran* in developing unity among the people of different religions. The work of the Atmiya Sabha was carried on by Maharishi Debendranath Tagore (father of Rabindranath Tagore), who renamed it as Brahmo Samaj. He turned the Brahmo Samaj into a leading social organisation of India. Raj Rammohan Roy is most remembered for helping Lord William Bentinck to declare the practice of *Sati* a punishable offence in 1829. He also protested against the child marriage and female infanticide. He favored the remarriage of widows, female education and women's right to property. He felt that the caste system was the greatest hurdle to Indian unity. He believed in the equality of mankind. He did not believe in the supremacy of the Brahmin priests. He favoured inter-caste marriages. He himself adopted a Muslim boy. In 1817, he founded the Hindu College (now Presidency College, Calcutta) along with David Hare, a missionary. He also set up schools for girls.

Rammohan Roy started the first Bengali weekly *Samvad Kaumudi* and edited a Persian weekly *Mirat-ul-akhbar*. He stood for the freedom of the press. Rammohan died in Bristol in England in 1833.

## Henry Vivian Derozio and the Young Bengal Movement

Henry Vivian Derozio was the founder of the **Young Bengal Movement**. He was born in Calcutta in 1809 and taught in the Hindu College, Calcutta. He died of cholera in 1833. His followers were known as the Derozians and their movement the Young Bengal Movement. They attacked old traditions and decadent customs. They also advocated women's rights and their education. They founded associations and organized debates against idol worship, casteism and superstitions.

## Swami Dayanand Saraswathi and the Arya Samaj

The **Arya Samaj** was founded by **Swami Dayanand Saraswathi** at Bombay in 1875. Born in Kathiawar in Gujarat, Swami Dayanand (1824-83) was a scholar, a patriot, a social reformer and a revivalist. He believed the *Vedas* were the source of true knowledge. His motto was "Back to the Vedas". He was against idol worship, child marriage and caste system based on birth. He encouraged intercaste marriages and widow remarriage. He started the Suddhi movement to bring back those Hindus who had converted to other religions to its fold. He wrote the book *Satyartha Prakash* which contains his ideas.

The Arya Samaj, though founded in Bombay, became very powerful in Punjab and spread its influence to

other parts of India. It has contributed very much to the spread of education. The first Dayanand Anglo-Vedic (DAV) School was founded in 1886 at Lahore. Many more schools came up in other parts of India in later years. The Arya Samaj had also spread nationalism. Hundreds of Arya

Samaj patriots, including Lala Lajpat Rai, took part in the Indian freedom struggle.

## Prarthana Samaj

The Prarthana Samaj was founded in 1867 in Bombay by **Dr. Atmaram Pandurang**. It was an off-shoot of Brahmo Samaj. It was a reform movement within Hinduism and concentrated on social reforms like inter-dining, inter-marriage, widow remarriage and uplift of women and depressed classes. Justice M.G. Ranade and R.G. Bhandarkar joined it in 1870 and infused **M.G. RANADE** new strength to it. Justice Ranade promoted the Deccan Education Society.

## Swami Vivekananda and Ramakrishna Mission

The original name of **Swami Vivekananda** was Narendranath Dutta (1863-1902) and he became the most famous disciple of **Shri Ramkrishna Paramahansa**. He was born in a prosperous Bengali family of Calcutta and educated in Scottish Church College. In 1886 Narendranath took the vow of **Sanyasa** and was given the name, Vivekananda. He preached Vedantic Philosophy.

He condemned the caste system and the current Hindu emphasis on rituals and ceremonies. Swami Vivekananda participated at the **Parliament of Religions** held in **Chicago (USA)** in September 1893 and raised the prestige of India and Hinduism very high. Vivekananda preached the message of strength and self-reliance. He asked the people to improve the lives of the poor and depressed classes. He believed that service to mankind is service to God. He founded the Ramkrishna Mission at Belur in Howrah in 1897. It is a social service and charitable society. The objectives of this Mission are providing humanitarian relief and social work through the establishment of schools, colleges, hospitals and orphanages.

## Theosophical Society

The Theosophical Society was founded in New York (USA) in 1875 by Madam H.P. Blavatsky, a Russian lady, and Henry Steel Olcott, an American colonel. Their main objectives were to form a universal brotherhood of man without any distinction of race, colour or creed and to promote the study of ancient religions and philosophies. They arrived in India and established their headquarters at Adyar in Madras in 1882. Later in 1893, Mrs. Annie Besant arrived in India and took over the leadership of the Society after the death of Olcott. Mrs. Annie Besant founded the Central Hindu School along with Madan Mohan Malaviya at Benaras which later developed into the Banaras Hindu University.

## Pandit Ishwar Chandra Vidyasagar

Pandit Ishwar Chandra was a great educator, humanist and social reformer.

He was born in 1820 in a village in Midnapur, Bengal. He rose to be the Head Pandit of the Bengali Department of Fort William College. He firmly believed that reform in Indian society could only come about through education. Vidyasagar founded many schools for girls. He helped J.D. Bethune to establish the Bethune School. He founded the Metropolitan Institution in Calcutta. He protested against child marriage and favoured widow



remarriage which was legalised by the Widow Remarriage Act (1856). It was due to his great support for the spread of education that he was given the title of Vidyasagar.

### Jyotiba Phule

Jyotiba Phule belonged to a low caste family in Maharashtra. He waged a life-long struggle against upper caste domination and Brahmanical supremacy. In 1873 he founded the Satyashodak Samaj to fight against the caste system. He pioneered the widow remarriage movement in Maharashtra and worked for the education for women. Jyotiba Phule and his wife established the first girls' school at Poona in 1851.

### Muslim Reform Movements

The Muslim reform movements started a little later because they had avoided western education in the beginning. The first effort was in 1863 when the Muhammad Literary Society was set up in Calcutta. Its aim was to popularise the study of English and western sciences. It established a number of schools in Bengal.

### Aligarh Movement

**The Aligarh Movement** was started by Sir Syed Ahmad Khan (1817-98) for the social and educational advancement of the Muslims in India. He fought against the medieval backwardness and advocated a rational approach towards religion. In 1866, he started the Mohammadan Educational Conference as a general forum for spreading liberal ideas among the Muslims. In 1875, he founded a modern school at Aligarh to promote English education among the Muslims. This had later grown into the **Mohammadan Anglo Oriental College** and then into the Aligarh Muslim University.

### The Deoband School

The orthodox section among the Muslim *ulema* organised the Deoband Movement. It was a revivalist movement whose twin objectives were: (i) to propagate among the Muslims the pure teachings of the *Koran* and the *Hadis* and (ii) to keep alive the spirit of *jihad* against the foreign rulers. The new Deoband leader Mahmud-ul-Hasan (1851-1920) sought to impart a political and intellectual content to the religious ideas of the school. The liberal interpretation of Islam created a political awakening among its followers.

### Sikh Reform Movement

Punjab also came under the spell of reforms. Baba Dayal Das founded the **Nirankari Movement**. He insisted the worship of God as nirankar (formless). The **Namdhari Movement** was founded by Baba Ram Singh. His followers wore white clothes and gave up meat eating. The Singh Sabhas started in Lahore and Amritsar in 1870 were aimed at reforming the Sikh society. They helped to set up the Khalsa College at Amritsar in 1892. They also encouraged Gurmukhi and Punjabi literature. In 1920, the Akalis started a movement to remove the corrupt Mahants (priests) from the Sikh gurudwaras. The British government was forced to make laws on this matter. Later, the Akalis organised themselves into a political party.

### Parsi Reform Movement

The Parsi Religious Reform Association was founded at Bombay by Furdunji Naoroji and S.S. Bengalee in 1851. They advocated the spread of women's education. They also wanted to reform their marriage customs. Naoroji published a monthly journal, *Jagat Mithra*. The momentum gathered through these reform movements and went a long way in uplifting the entire community. By the middle of the twentieth century most of them

were highly placed in various capacities and have made a significant contribution to India's development.

### Saint Ramalinga

Saint Ramalinga was one of the foremost saints of Tamil Nadu in the nineteenth century. He was born on October 5, 1823 at Marudhur, near Chidambaram. He was the last son of his father, Ramayya Pillai and mother, Chinnammayar.

Developing a deep interest in spiritual life, Ramalinga moved to Karunguli in 1858, a place near Vadalur where the Saint later settled down. His divine powers came to be recognised at the early age of eleven. In 1865 he founded the **Samarasa Suddha Sanmargha Sangha** for the promotion of his ideals of establishing a casteless society. He preached love and compassion to the people. He composed *Tiru Arutpa*. His other literary works include *Manu Murai Kanda Vasagam* and *Jeewa Karunyam*. His language was so simple as to enable the illiterate people to understand his teachings. In 1870 he moved to Mettukuppam, a place three miles away from Vadalur. There he started constructing the **Satya Gnana Sabai** in 1872. He introduced the principle that God could be worshipped in the form of Light.

### Sri Vaikunda Swamigal

Sri Vaikunda Swamigal was born in 1809 at Swamithoppu in the Kanyakumari district of Tamil Nadu. His original name was Mudichoodum Perumal but he was called Muthukkutty. He preached against the caste system and untouchability. He also condemned religious ceremonies. Many came to his place to worship him and slowly his teachings came to be known as **Ayyavazhi**. By the midnineteenth century, Ayyavazhi came to be recognized as a separate religion and spread in the regions of South Travancore and South Tirunelveli. After his death, the religion was spread on the basis of his teachings and the religious books *Akilattirattu Ammanai* and *Arul Nool*. Hundreds of Nizhal Thangals (places of worship) were built across the country.

### Self-Respect Movement and Periyar E.V.R.

Periyar E.V. Ramaswamy was a great social reformer. In 1921, during the anti-liquor campaign he cut down 1000 coconut trees in his own farm. In 1924, he took an active part in the Vaikam Satyagraha. The objective of the Satyagraha was to secure for untouchables the right to use a road near a temple at Vaikom in Kerala. E.V.R. opposed the **Varnashrama policy** followed in the V.V.S. Iyer's Seranmadevi Gurugulam. During 1920-1925 being in the Congress Party he stressed that Congress should accept communal representation.

Subsequently in 1925, he started the "Self-Respect Movement". The aims of the 'Self -Respect Movement' were to uplift the Dravidians and to expose the Brahminical tyranny and deceptive methods by which they controlled all spheres of Hindu life. He denounced the caste system, child marriage and enforced widowhood. He encouraged inter-caste marriages. He himself conducted many marriages without any rituals. Such a marriage was known as "Self-Respect Marriage." He gave secular names to new born babies.

He attacked the laws of Manu, which he called the basis of the entire Hindu social fabric of caste. He founded the Tamil journals *Kudiarasu*, *Puratchi* and *Viduthalai* to propagate his ideals.

In 1938 at Tamil Nadu Women's Conference appreciating the noble service rendered by E.V.R. he was given the title "**Periyar**". On 27th June 1970 by the UNESCO

organisation praised and adorned with the title “Socrates of South Asia”.

## Chapter 12 Indian National Movement (1885-1905)

### Learning Objectives

Students will acquire knowledge about

1. The growth of East India Company's Rule in India.
1. Origin and growth of nationalism in India..
2. Birth of Indian National Congress.
3. The objectives and methods of Early Nationalist Movement.
4. Leaders of this period.
5. Achievements of moderates.

### Factors Promoting the Growth of Nationalism in India

The following causes are responsible for the origin and growth of nationalism in India.

#### 1. Political Unity

For the first time, most of the regions in India were united politically and administratively under a single power (the British rule). It introduced a uniform system of law and government.

#### 2. Development of Communication and Transport

The introduction of railways, telegraphs and postal services and the construction of roads and canals facilitated communication among the people. All these brought Indians nearer to each other and provided the facility to organise the national movement on an all India basis.

#### 3. English Language and Western Education

The English language played an important role in the growth of nationalism in the country. The English educated Indians, who led the national movement, developed Indian nationalism and organised it. Western education facilitated the spread of the concepts of liberty, equality, freedom and nationalism and sowed the seeds of nationalism.

#### 4. The Role of the Press

The Indian Press, both English and vernacular, had also aroused the national consciousness.

#### 5. Social and Religious Movements of the Nineteenth Century

The leaders of various organisations like the Brahmo Samaj, Ramakrishna Mission, Arya Samaj, and Theosophical Society generated a feeling of regard for and pride in the motherland.

#### 6. Economic Exploitation by the British

A good deal of anti-British feeling was created by the economic policy pursued by the British government in India. The English systematically ruined the Indian trade and native industries. Therefore, economic exploitation by the British was one of the most important causes for the rise of Indian nationalism.

#### 7. Racial Discrimination

The Revolt of 1857 created a kind of permanent bitterness and suspicion between the British and the Indians. The English feeling of racial superiority grew. India as a nation and Indians as individuals were subjected to insults, humiliation and contemptuous treatment.

#### 8. Administration of Lytton

Lord Lytton arranged the Delhi Durbar at a time when the larger part of India was in the grip of famine. He passed the Vernacular Press Act which curbed the liberty of the Indian Press. His Arms Act was a means to

prevent the Indians from keeping arms. All these measures created widespread discontent among the Indians.

#### 9. The Ilbert Bill controversy

The Ilbert Bill was presented in the Central Legislature during the Viceroyalty of Lord Ripon. The Bill tried to remove racial inequality between Indian and European judges in courts. This Bill was opposed by the British residents in India. Ultimately the Bill was modified. Thus various factors contributed to the rise of nationalism and the formation of the Indian National Congress.

### Early Political Associations

*The British Indian Association - 1851 Bengal The Bombay Association — 1852 Dadabhai Naoroji East India Association 1856 London Madras Native Association 1852 Poona Sarvajanik Sabha—1870 The Madras Mahajana Sabha—1884*

### The Indian National Congress (1885)

#### A. O. HUME

Allan Octavian Hume, a retired civil servant in the British Government took the initiative to form an all-India organization. Thus, the Indian National Congress was founded and its first session was held at Bombay in 1885. **W.C. Banerjee** was its first president. It was attended by 72 delegates from all over India. Persons attending the session belonged to different religious faiths. They discussed the problems of all the Indians irrespective of their religion, caste, language and regions. Thus Indian National Congress from the start was an all-India secular movement embracing every section of Indian society. The second session was held in Calcutta in 1886 and the third in Madras in 1887.

The history of the Indian National Movement can be studied in three important phases:

- (i) The phase of moderate nationalism (1885-1905) when the Congress continued to be loyal to the British crown.
- (ii) The years 1906-1916 witnessed- Swadeshi Movement, rise of militant nationalism and the Home Rule Movement.
- (iii) The period from 1917 to 1947 is known as the Gandhian era.

### Moderate Nationalism

The leading figures during the first phase of the National Movement were A.O. Hume, W.C. Banerjee, Surendra Nath Banerjee, Dadabhai Naoroji, Feroze Shah Mehta, Gopalakrishna Gokhale, Pandit Madan Mohan Malaviya, Badruddin Tyabji, Justice Ranade and G. Subramanya Aiyar.

Surendranath Banerjee was called the **Indian Burke**. He firmly opposed the Partition of Bengal. He founded the **Indian Association** (1876) to agitate for political reforms. He had convened the **Indian National Conference** (1883) which merged with the Indian National Congress in 1886. G. Subramanya Aiyar preached nationalism through the Madras Mahajana Sabha. He also founded the *The Hindu* and *Swadesamitran*. Dadabhai Naoroji was known as the **Grand Old Man of India**. He is regarded as India's unofficial Ambassador in England. He was the first Indian to become a Member of the British House of Commons. Gopal Krishna Gokhale was regarded as the political guru of Gandhi. In 1905, he founded the **Servants of India Society** to train Indians to dedicate their lives to the cause of the country.

For a few years the Congress enjoyed the patronage of the British administrators. Between 1885 and 1905, the Congress leaders were moderates. The Moderates had

faith in the British justice and goodwill. They were called moderates because they adopted peaceful and constitutional means to achieve their demands.

### Main Demands of Moderates

- Expansion and reform of legislative councils.
- Greater opportunities for Indians in higher posts by holding the ICS examination simultaneously in England and in India.
- Separation of the judiciary from the executive.
- More powers for the local bodies.
- Reduction of land revenue and protection of peasants from unjust landlords.
- Abolition of salt tax and sugar duty.
- Reduction of spending on army.
- Freedom of speech and expression and freedom to form associations

### Methods of Moderates

The Moderates had total faith in the British sense of justice and fair play. They were loyal to the British. They looked to England for inspiration and guidance. The Moderates used petitions, resolutions, meetings, leaflets and pamphlets, memorandum and delegations to present their demands. They confined their political activities to the educated classes only. Their aim was to attain political rights and self-government stage by stage. In the beginning, the British Government welcomed the birth of the Indian National Congress. In 1886, Governor General Lord Dufferin gave a tea garden party for the Congress members in Calcutta. The government officials had also attended Congress sessions. With the increase in Congress demands, the government became unfriendly. It encouraged the Muslims to stay away from the Congress. The only demand of the Congress granted by the British was the expansion of the legislative councils by the Indian Councils Act of 1892.

### Achievements of Moderates

1. The Moderates were able to create a wide national awakening among the people.
2. They popularized the ideas of democracy, civil liberties and representative institutions.
3. They explained how the British were exploiting Indians. Particularly, Dadabhai Naoroji in his famous book *Poverty and Un-British Rule in India* wrote his Drain Theory. He showed how India's wealth was going away to England in the form of: (a) salaries, (b) savings, (c) pensions, (d) payments to British troops in India and (e) profits of the British companies. In fact, the British Government was forced to appoint the Welby Commission, with Dadabhai as the first Indian as its member, to enquire into the matter.
4. Some Moderates like Ranade and Gokhale favoured social reforms. They protested against child marriage and widowhood.
5. The Moderates had succeeded in getting the expansion of the legislative councils by the Indian Councils Act of 1892.

## Chapter 13 Indian National Movement (1905-1916)

### Learning Objectives

Students will come to know

1. The causes for the rise of extremism in the Indian National Movement.
2. Main objective and methods of extremists.
3. Leaders of extremists such as Tilak, Bipin Chandra Pal and Lala Lajpat Rai.

### 4. The impact of the Partition of Bengal on national movement.

### 5. Swadeshi Movement and the achievements of extremists.

### 6. The birth of Muslim League.

### 7. The Home Rule Movement.

The period from 1905 was known as the era of extremism in the Indian National Movement. The extremists or the aggressive nationalists believed that success could be achieved through bold means. The important extremist leaders were Lala Lajpat Rai, Bal Gangadhar Tilak, Bipin Chandra Pal and Aurobindo Ghosh.

### Causes for the Rise of Extremism

1. The failure of the Moderates to win any notable success other than the expansion of the legislative councils by the Indian Councils Act (1892).
2. The famine and plague of 1896-97 which affected the whole country and the suffering of the masses. The economic conditions of the people became worse. The ill-treatment of Indians in South Africa on the basis of colour of skin.
3. The Russo-Japanese war of 1904-5 in which Japan defeated the European power Russia. This encouraged Indians to fight against the European nation, Britain.
4. The immediate cause for the rise of extremism was the reactionary rule of Lord Curzon:

He passed the Calcutta Corporation Act, (1899) reducing the Indian control of this local body. The Universities Act (1904) reduced the elected members in the University bodies. It also reduced the autonomy of the universities and made them government departments. The Sedition Act and the Official Secrets Act reduced the freedoms of all people. His worst measure was the Partition of Bengal (1905).

### Main Objective of Extremists

Their main objective was to attain *Swaraj* or complete independence and not just self-government.

### Methods of the Extremists

The Extremists had no faith in the British sense of justice and fair play. They pointed out the forceful means by which the British had taken control of India. They believed that political rights will have to be fought for. They had the spirit of self-reliance and self-determination.

### The methods used by the extremists were:

1. Not cooperating with the British Government by boycotting government courts, schools and colleges.
2. Promotion of Swadeshi and boycott of foreign goods.
3. Introduction and promotion of national education.

### Leaders of the Extremists

The extremists were led by Bala Gangadhar Tilak, Lala Lajpat Rai, Bipinchandra Pal and Aurobindo Ghosh. Bal Gangadhar Tilak is regarded as the real founder of the popular anti-British movement in India. He was known as '**Lokamanya**'. He attacked the British through his weeklies *The Mchrcitta* and the *Kesciri*. He was jailed twice by the British for his nationalist activities and in 1908 deported to Mandalay for six years. He set up the Home Rule League in 1916 at Poona and declared "Swaraj is my birth-right and I will have it." Lala Lajpat Rai is popularly known as the '**Lion of Punjab**'. He played an important role in the Swadeshi Movement. He founded the Indian Home Rule League in the US in 1916. He was deported to Mandalay on the ground of sedition. He received fatal injuries while



leading a procession against the Simon Commission and died on November 17, 1928.

Bipan Chandra Pal began his career as a moderate and turned an extremist. He played an important role in the Swadeshi Movement. He preached nationalism through the nook and corner of Indian by his powerful speeches and writings.

Aurobinda Ghosh was another extremist leader and he actively participated in the Swadeshi Movement. He was also imprisoned. After his release he settled in the French territory of Pondicherry and concentrated on spiritual activities.

### Partition of Bengal and the Rise of Extremism

The partition of Bengal in 1905 provided a spark for the rise of extremism in the Indian National Movement. Curzon's real motives were:

- To break the growing strength of Bengali nationalism since Bengal was the base of Indian nationalism.
- To divide the Hindus and Muslims in Bengal.
- To show the enormous power of the British Government in doing whatever it liked.

On the same day when the partition came into effect, 16 October 1905, the people of Bengal organised protest meetings and observed a day of mourning. The whole political life of Bengal underwent a change. Gandhi wrote that the real awakening in India took place only after the Partition of Bengal. The anti-partition movement culminated into the Swadeshi Movement and spread to other parts of India.

The aggressive nationalists forced Dadabhai Naoroji to speak of *Swaraj* (which was not a Moderate demand) in the Calcutta Session of Congress in 1906. They adopted the resolutions of Boycott and Swadeshi. The Moderate Congressmen were unhappy. They wanted *Swaraj* to be achieved through constitutional methods. The differences led to a split in the Congress at the Surat session in 1907. This is popularly known as the famous **Surat Split**. The extremists came out of the Congress led by Tilak and others.

### Swadeshi Movement

The Swadeshi Movement involved programmes like the boycott of government service, courts, schools and colleges and of foreign goods, promotion of Swadeshi goods, Promotion of National Education through the establishment of national schools and colleges. It was both a political and economic movement.

The Swadeshi Movement was a great success. In Bengal, even the landlords joined the movement. The women and students took to picketing. Students refused using books made of foreign paper.

The government adopted several tough measures. It passed several Acts to crush the movement. The Swadeshi volunteers were beaten badly. The cry of *Bande Mataram* was forbidden. Schools and colleges were warned not to allow their students to take part in the movement or else their aid would be stopped. Some Indian government employees lost their jobs. Extremist leaders Bala Gangadhar Tilak, Lala Lajpat Rai, Bipin Chandra Pal and Aurobindo Ghosh were imprisoned and deported.

### Achievements of Extremists

The achievements of extremists can be summed up as follows:

1. They were the first to demand *Swaraj* as a matter of birth right.
2. They involved the masses in the freedom struggle and broadened the social base of the National Movement.

3. They were the first to organize an all-India political movement, viz. the Swadeshi Movement.

### Formation of the Muslim League (1906)

In December 1906, Muslim delegates from all over India met at Dacca for the Muslim Educational Conference. Taking advantage of this occasion, **Nawab Salimullah of Dacca** proposed the setting up of an organisation to look after the Muslim interests. The proposal was accepted. The **All-India Muslim League** was finally set up on December 30, 1906. Like the Indian National Congress, they conducted annual sessions and put their demands to the British government. Initially, they enjoyed the support of the British. Their first achievement was the separate electorates for the Muslims in the Minto-Morley reforms.

### The Lucknow Pact (1916)

During the 1916 Congress session at Lucknow two major events occurred. The divided Congress became united. An understanding for joint action against the British was reached between the Congress and the Muslim League and it was called the **Lucknow Pact**. The signing of the Lucknow Pact by the Congress and the Muslim League in 1916 marked an important step in the Hindu-Muslim unity.

### The Home Rule Movement (1916)

Two Home Rule Leagues were established, one by B.G. Tilak at Poona in April 1916 and the other by Mrs. Annie Besant at Madras in September 1916. The aim of the Movement was to get selfgovernment for India within the British Empire. It believed freedom was the natural right of all nations. Moreover, the leaders of the Home Movement thought that India's resources were not being used for her needs.

The two Leagues cooperated with each other as well with the Congress and the Muslim League in putting their demand for home rule. While Tilak's Movement concentrated on Maharashtra, Annie Besant's Movement covered the rest of the country. The Home Rule Movement had brought a new life in the national movement. There was a revival of Swadeshi. Women joined in larger numbers.

On 20 August 1917, Montague, the Secretary of State in England, made a declaration in the Parliament of England on British Government's policy towards future political reforms in India. He promised the gradual development of self-governing institutions in India. This August Declaration led to the end of the Home Rule Movement.

### Revolutionary Movements

In the first half of the 20th century, revolutionary groups sprang up mainly in Bengal, Maharashtra, Punjab and Madras. The revolutionaries were not satisfied with the methods of both the moderates and extremists. Hence, they started many revolutionary secret organizations. In Bengal **Anusilan Samiti** and **Jugantar** were established. In Maharashtra Savarkar brothers had set up **Abhinava Bharat**. In the Madras Presidency, **Bharathamatha Association** was started by Nilakanta Bramachari.

In Punjab Ajit Singh set up a secret society to spread revolutionary ideas among the youth. In London, at India House, Shyamji Krishna Verma gathered young Indian nationalists like Madan Lal Dhingra, Savarkar, V.V.S. Iyer and T.S.S. Rajan. Lala Hardyal set up the '**Ghadar Party**' in USA to organise revolutionary activities from outside India.

## Chapter 14

### The Indian National Movement (1917-1947)

*Students will acquire knowledge about*

1. The life of Mahatma Gandhi and his involvement in Indian freedom struggle.
2. The impact of Jallianwala Bagh massacre on the national movement.
3. The Khilafat and Non-Cooperation Movement.
4. The Civil-Disobedience Movement and Salt Satyagraha.
5. The Quit India Movement and its impact on the Freedom Struggle.
6. The Cabinet Mission Plan.

#### Advent of Gandhi

The third and final phase of the Nationalist Movement [1917-1947] is known as the Gandhian era. During this period Mahatma Gandhi became the undisputed leader of the National Movement. His principles of **non-violence** and **Satyagraha** were employed against the British Government. Gandhi made the nationalist movement a **mass movement**.

Mohandas Karamchand Gandhi was born at Porbandar in Gujarat on 2 October 1869. He studied law in England. He returned to India in 1891. In April 1893 he went to South Africa and involved himself in the struggle against **apartheid** (Racial discrimination against the Blacks) for twenty years. Finally, he came to India in 1915. Thereafter, he fully involved himself in the Indian National Movement.

Mahatma Gandhi began his experiments with Satyagraha against the oppressive European indigo planters at **Champaran** in Bihar in 1917. In the next year he launched another **Satyagraha at Kheda** in Gujarat in support of the peasants who were not able to pay the land tax due to failure of crops. During this struggle, Sardar Vallabhai Patel emerged as one of the trusted followers of Gandhi. In 1918, Gandhi undertook a fast unto death for the cause of **Ahmedabad Mill Workers** and finally the mill owners conceded the just demands of the workers.

On the whole, the local movements at Champaran, Kheda and Ahmedabad brought Mahatma Gandhi closer to the life of the people and their problems at the grass roots level. Consequently, he became the leader of the masses.

#### Rowlatt Act (1919)

In 1917, a committee was set up under the presidency of Sir Sydney Rowlatt to look into the militant Nationalist activities. On the basis of its report the Rowlatt Act was passed in March 1919 by the Central Legislative Council. As per this Act, any person could be arrested on the basis of suspicion. No appeal or petition could be filed against such arrests. This Act was called the Black Act and it was widely opposed. An all-India hartal was organized on 6 April 1919. Meetings were held all over the country. Mahatma Gandhi was arrested near Delhi. Two prominent leaders of Punjab, Dr Satya Pal and Dr. Saifuddin Kitchlew, were arrested in Amritsar.

#### Jallianwala Bagh Massacre (13 April, 1919)

The Jallianwala Bagh Massacre took place on 13 April 1919 and it remained a turning point in the history of India's freedom movement. In Punjab, there was an unprecedented support to the Rowlatt Satyagraha. Facing a violent situation, the

Government of Punjab handed over the administration to the military authorities under General Dyer. He banned all public meetings and detained the political leaders. On 13<sup>th</sup> April, the Baisakhi day (harvest festival), a public meeting was organized at the Jallianwala Bagh (garden). Dyer marched in and without any warning opened fire on the crowd. The firing continued for about 10 to 15 minutes and it stopped only after the ammunition exhausted. According to official report 379 people were killed and 1137 wounded in the incident. There was a nationwide protest against this massacre and Rabindranath Tagore renounced his knighthood as a protest. The Jallianwala Bagh massacre gave a tremendous impetus to the freedom struggle.

#### Khilafat Movement

The chief cause of the Khilafat Movement was the defeat of Turkey in the First World War. The harsh terms of the **Treaty of Sevres (1920)** was felt by the Muslims as a great insult to them. The whole movement was based on the Muslim belief that the Caliph (the Sultan of Turkey) was the religious head of the Muslims all over the world. The Muslims in India were upset over the British attitude against Turkey and launched the Khilafat Movement.

Maulana Abul Kalam Azad, M.A. Ansari, Saifuddin Kitchlew and the Ali brothers were the prominent leaders of this movement. A Khilafat Committee had been formed and on 19<sup>th</sup> October 1919, the whole country had observed the Khilafat day. On 23 November, a joint conference of the Hindus and the Muslims had also been held under the chairmanship of Mahatma Gandhi. Mahatma Gandhi was particularly interested in bringing the Hindus and the Muslims together to achieve the country's independence. Subsequently, the Khilafat Movement merged with the Non-Cooperation Movement launched by Mahatma Gandhi in 1920.

#### Non-Cooperation Movement (1920-1922)

Mahatma Gandhi announced his plan to begin Non-Cooperation with the government as a sequel to the Rowlatt Act, Jallianwala Bagh massacre and the Khilafat Movement. It was approved by the Indian National Congress at the Nagpur session in December, 1920.

#### Programmes

The programmes of the Non-Cooperation Movement were:

- Surrender of titles and honorary positions.
- Resignation of membership from the local bodies.
- Boycott of elections held under the provisions of the 1919 Act.
- Boycott of government functions.
- Boycott of courts, government schools and colleges.
- Boycott of foreign goods.
- Establishment of national schools, colleges and private panchayat courts.
- Popularizing swadeshi goods and khadi.

The movement began with Mahatma Gandhi renouncing the titles, which were given by the British. Other leaders and influential persons also followed him by surrendering their honorary posts and titles. Students came out of the government educational institutions. National schools such as the Kashi Vidyapeeth, the Bihar Vidyapeeth and the Jamia Millia Islamia were set up. All the prominent leaders of the country gave up their lucrative legal practice. Legislatures were boycotted. No leader of the Congress came forward to contest the elections for the Legislatures. In 1921, mass demonstrations were held against the

Prince of Wales during his tour of India. The government resorted to strong measures of repression. Many leaders were arrested. The Congress and the Khilafat Committees were proclaimed as illegal. At several places, bonfires of foreign clothes were organised. The message of *Swadeshi* spread everywhere. Most of the households took to weaving cloths with the help of *charkhas*.

But the whole movement was abruptly called off on 11<sup>th</sup> February 1922 by Gandhi following the **Churi Chaura incident** in the Gorakpur district of U.P. Earlier on 5<sup>th</sup> February an angry mob set fire to the police station at Churi Chaura and twenty two police men were burnt to death. Many top leaders of the country were stunned at this sudden suspension of the Non-Cooperation Movement. Mahatma Gandhi was arrested on 10 March 1922.

### Significance of the Non-Cooperation Movement

1. It was the real mass movement with the participation of different sections of Indian society such as peasants, workers, students, teachers and women.
2. It witnessed the spread of nationalism to the remote corners of India.
3. It also marked the height of Hindu-Muslim unity as a result of the merger of Khilafat movement.
4. It demonstrated the willingness and ability of the masses to endure hardships and make sacrifices.

### Swaraj Party

The suspension of the Non-Cooperation Movement led to a split within Congress in the **Gaya session** of the Congress in December 1922. Leaders like Motilal Nehru and Chitranjan Das formed a separate group within the Congress known as the Swaraj Party on 1 January 1923. The Swarajists wanted to contest the council elections and wreck the government from within. Elections to Legislative Councils were held in November 1923. In this, the **Swaraj Party** gained impressive successes. In the Central Legislative Council Motilal Nehru became the leader of the party whereas in Bengal the party was headed by C.R. Das.

The Swaraj Party did several significant things in the Legislative Council. It demanded the setting up of responsible government in India with the necessary changes in the Government of India Act of 1919. The party could pass important resolutions against the repressive laws of the government. When a Committee chaired by the Home Member, Alexander Muddiman considered the system of Dyarchy as proper, a resolution was passed against it in the Central Legislative Council. After the passing away of C.R. Das in June 1925, the Swaraj Party started weakening.

### Simon Commission (1927)

The Act of 1919 included a provision for its review after a lapse of ten years. However, the review commission was appointed by the British Government two years earlier of its schedule in 1927. It came to be known as **Simon Commission** after the name of its chairman, Sir John Simon. All its seven members were Englishmen. As there was no Indian member in it, the Commission faced a lot of criticism even before its landing in India. Almost all the political parties including the Congress decided to oppose the Commission.

On the fateful day of 3 February 1928 when the Commission reached Bombay, a general hartal was observed all over the country. Everywhere it was greeted with black flags and the cries of 'Simon go back'. At Lahore, the students took out a large anti-Simon

Commission demonstration on 30 October 1928 under the leadership of Lala Lajpat Rai. In this demonstration, Lala Lajpat Rai was seriously injured in the police *lathi* charge and he passed away after one month.

The report of the Simon Commission was published in May 1930. It was stated that the constitutional experiment with Dyarchy was unsuccessful and in its place the report recommended the establishment of autonomous government. There is no doubt that the Simon Commission's Report became the basis for enacting the Government of India Act of 1935.

### Nehru Report (1928)

In the meanwhile, the Secretary of State, Lord Birkenhead, challenged the Indians to produce a Constitution that would be acceptable to all. The challenge was accepted by the Congress, which convened an all party meeting on 28 February 1928. A committee consisting of eight was constituted to draw up a blueprint for the future Constitution of India. It was headed by Motilal Nehru. The Report published by this Committee came to be known as the **Nehru Report**.

The Report favoured:

- Dominion Status as the next immediate step.
- Full responsible government at the centre.
- Autonomy to the provinces.
- Clear cut division of power between the centre and the provinces.
- A bicameral legislature at the centre.

However, the leader of the Muslim League, Mohammad Ali Jinnah regarded it as detrimental to the interests of the Muslims. Jinnah convened an All India Conference of the Muslims where he drew up a list of **Fourteen Points** as Muslim League demand.

### Civil Disobedience (1930-1934)

In the prevailing atmosphere of restlessness, the annual session of the Congress was held at Lahore in December 1929. During this session presided over by Jawaharlal Nehru the Congress passed the **Poorna Swaraj** resolution. Moreover, as the government failed to accept the Nehru Report, the Congress gave a call to launch the Civil Disobedience Movement. The Congress had also observed January 26, 1930 as the Day of Independence. Since then January 26<sup>th</sup> had been observed as a day of independence every year. The same date later became the Republic Day when the Indian Constitution was enforced in 1950.

### The Dandi March

Thus, the stage was set for the second major struggle led by the Congress. On 12<sup>th</sup> March 1930, on 6 April formally launched Gandhi began his famous March to Dandi with his chosen 79 followers to break the salt laws. He reached the coast of Dandi on 5 April 1930 after marching a distance of 200 miles and the Civil Disobedience Movement by breaking the salt laws.

On 9 April, Mahatma Gandhi laid out the programme of the movement which included making of salt in every village in violation of the existing salt laws; picketing by women before the shops selling liquor, opium and foreign clothes; organising the bonfires of foreign clothes; spinning clothes by using *charkha* fighting untouchability; boycotting of schools and colleges by students and resigning from government jobs by the people. Over and above all these, the programme also called upon the people not to pay taxes to the government.

Soon, the movement spread to all parts of the country. Students, workers, farmers and women, all participated



in this movement with great enthusiasm. As a reaction, the British Government arrested important leaders of the Congress and imprisoned them.

### Round Table Conference

The British government adopted the strategy of talking to different political parties by convening the Round Table Conferences. The first Round Table Conference was held in November 1930 at London and it was boycotted by the Congress.

In January 1931 in order to create a conducive atmosphere for talks, the government lifted the ban on the Congress Party and released its leaders from prison. On 8 March 1931 the **Gandhi-Irwin Pact** was signed. As per this pact, Mahatma Gandhi agreed to suspend the Civil-Disobedience Movement and participate in the Second- Round Table Conference. In September 1931, the Second Round Table Conference was held at London. Mahatma Gandhi participated in the Conference but returned to India disappointed as no agreement could be reached on the demand of complete independence and on the communal question. In January 1932, the Civil-Disobedience Movement was resumed. The government responded to it by arresting Mahatma Gandhi and Sardar Patel and by reimposing the ban on the Congress party.

### Poona Pact (1932)

By 1930, Dr Ambedkar had become a leader of national stature championing the cause of the depressed people of the country. While presenting a real picture of the condition of these people in the First Round Table Conference, he had demanded separate electorates for them. On 16 August 1932 the British Prime Minister Ramsay MacDonald made an announcement, which came to be as the **Communal Award**. According to this award, the depressed classes were considered as a separate community and as such provisions were made for separate electorates for them. Mahatma Gandhi protested against the Communal Award and went on a fast unto death in the Yeravada jail on 20 September 1932.

Finally, an agreement was reached between Dr Ambedkar and Gandhi. This agreement came to be called as the **Poona Pact**. The British Government also approved of it. Accordingly, 148 seats in different Provincial Legislatures were reserved for the Depressed Classes in place of 71 as provided in the Communal Award.

The third Round Table Conference came to an end in 1932. The Congress once more did not take part in it. Nonetheless, in March 1933, the British Government issued a White Paper, which became the basis for the enactment of the Government of India Act, 1935.

### The Second World War and National Movement

In 1937 elections were held under the provisions of the Government of India Act of 1935. Congress Ministries were formed in seven states of India. On 1 September 1939 the Second World War broke out. The British Government without consulting the people of India involved the country in the war. The Congress vehemently opposed it and as a mark of protest the Congress Ministries in the Provinces resigned on 12 December 1939. The Muslim League celebrated that day as the **Deliverance Day**. In March 1940 the Muslim League demanded the creation of Pakistan.

### Individual Satyagraha

During the course of the Second World War in order to

secure the cooperation of the Indians, the British Government made an announcement on 8 August 1940, which came to be known as the '**August Offer**'. The August Offer envisaged that after the War a representative body of Indians would be set up to frame the new Constitution. Gandhi was not satisfied with its offer and decided to launch **Individual Satyagraha**. Individual Satyagraha was limited, symbolic and non-violent in nature and it was left to Mahatma Gandhi to choose the Satyagrahis. Acharya Vinoba Bhave was the first to offer Satyagraha and he was sentenced to three months imprisonment. Jawaharlal Nehru was the second Satyagrahi and imprisoned for four months. The individual Satyagraha continued for nearly 15 months.

### Cripps Mission (1942)

In the meantime, the Viceroy, Lord Linlithgow expanded his Executive Council by including five more Indians into it in July 1941. However, in the midst of worsening wartime international situation, the British Government in its continued effort to secure Indian cooperation sent Sir Stafford Cripps to India on 23 March 1942. This is known as **Cripps Mission**.

The main recommendations of Cripps were:

- The promise of Dominion Status to India,
- Protection of minorities
- setting up of a Constituent Assembly in which there would be representatives from the Princely States along with those of the British Provinces,
- There would be provision for any Province of British India not prepared to accept this Constitution, either to retain its present constitutional position or frame a constitution of its own.

The major political parties of the country rejected the Cripps proposals. Gandhi called Cripps's proposals as a '**Post-dated Cheque**'. They did not like the rights of the Princely States either to send their representatives to the Constituent Assembly or to stay out of the Indian Union. The Muslim League was also dissatisfied as its demand for Pakistan had not been conceded in the proposal.

### Quit India Movement (1942-1944)

The failure of the Cripps Mission and the fear of an impending Japanese invasion of India led Mahatma Gandhi to begin his campaign for the British to quit India. Mahatma Gandhi believed that an interim government could be formed only after the British left India and the Hindu-Muslim problem sorted out. The All India Congress Committee met at Bombay on 8 August 1942 and passed the famous **Quit India Resolution**. On the same day, Gandhi gave his call of '**do or die**'.

On 8<sup>th</sup> and 9<sup>th</sup> August 1942, the government arrested all the prominent leaders of the Congress. For once, this pre-planned action of the government left the Indian people without leadership. Mahatma Gandhi was kept in prison at Poona. Pandit Jawaharlal Nehru, Abul Kalam Azad, and other leaders were imprisoned in the Ahmednagar Fort.

At this time, leadership was provided by Ram Manohar Lohia, Achyuta and S.M. Joshi. The role of Jayaprakash Narain in this movement was important. Large number of students also left their schools and colleges to join the movement. The youth of the nation also participated in this movement with patriotism. Strikes, demonstrations and public meetings were organised in various towns and cities. Slowly the movement reached the rural areas. In 1943, as the movement gained further momentum, there were armed attacks on government

buildings in Madras and Bengal. In 1944 Mahatma Gandhi was released from jail. Quit India Movement was the final attempt for country's freedom. The British Government ordered for 538 rounds of firing. Nearly 60,229 persons were jailed. At least 7,000 people were killed. This movement paved the way for India's freedom. It aroused among Indians the feelings of bravery, enthusiasm and total sacrifice.

### Indian National Army

During the course of the Second World War, armed revolutionary activities continued to take place. The role of Subhas Chandra Bose towards such activities is incomparable. On 2 July 1943, Subhas Chandra Bose reached Singapore and gave the rousing war cry of '**Dilli Chalo**'. He was made the President of Indian 'Independence League and soon became the supreme commander of the **Indian National Army**. He gave the country the slogan of Jai Hind. The names of the INA's three Brigades were the Subhas Brigade, Gandhi Brigade and Nehru Brigade. The women's wing of the army was named after Rani Laxmibai. The Indian National Army marched towards Imphal after registering its victory over Kohima. After Japan's surrender in 1945, the INA failed in its efforts. Under such circumstances, Subhas went to Taiwan. Then on his way to Tokyo he died on 18 August 1945 in a plane crash.

The trial of the soldiers of INA was held at Red Fort in Delhi. Pandit Jawaharlal Nehru, Bhulabhai Desai and Tej Bahadur Sapru fought the case on behalf of the soldiers.

### Cabinet Mission (1946)

After the Second World War, Lord Atlee became the Prime Minister of England. On 15 March, 1946 Lord Atlee made a historic announcement in which the right to self-determination and the framing of a Constitution for India were conceded. Consequently, three members of the British Cabinet - Pathick Lawrence, Sir Stafford Cripps and A. V. Alexander - were sent to India. This is known as the **Cabinet Mission**.

The Cabinet Mission put forward a plan for solution of the constitutional problem. Provision was made for three groups of provinces to possess their separate constitutions. The Cabinet Mission also proposed the formation of a Union of India, comprising both the British India and the Princely States. The Union would remain in charge of only foreign affairs, defence and communications leaving the residuary powers to be vested in the provinces. A proposal was envisaged for setting up an Interim Government, which would remain in office till a new government was elected on the basis of the new Constitution framed by the Constituent Assembly. Both the Muslim League and the Congress accepted the plan.

Consequently, elections were held in July 1946 for the formation of a Constituent Assembly. The Congress secured 205 out of 214 General seats. The Muslim League got 73 out of 78 Muslim seats. An Interim Government was formed under the leadership of Jawaharlal Nehru on 2 September 1946.

### Mountbatten Plan (1947)

On 20 February 1947, Prime Minister Atlee announced in the House of Commons the definite intention of the British Government to transfer power to responsible Indian hands by a date not later than June 1948. Thus, to effect the transference of that power Atlee decided to send Lord Mountbatten as Viceroy to India. Lord Mountbatten armed with vast powers became

India's Viceroy on 24 March 1947. The partition of India and the creation of Pakistan appeared inevitable to him. After extensive consultation Lord Mountbatten put forth the plan of partition of India on **3 June 1947**. The Congress and the Muslim League ultimately approved the **Mountbatten Plan**.

### Indian Independence Act 1947

Indian Independence

The British Government accorded formal approval to the Mountbatten Plan by enacting the Indian Independence Act on 18 July 1947. The salient features of this Act were:

- The partition of the country into India and Pakistan would come into effect from 15 August 1947.
- The British Government would transfer all powers to these two Dominions.
- A Boundary Commission would demarcate the boundaries of the provinces of the Punjab and Bengal.
- The Act provided for the transfer of power to the Constituent Assemblies of the two Dominions, which will have full authority to frame their respective Constitutions.

## Chapter 15 constitutional Development (1858 - 1947)

### Learning Objectives

1. The history of constitutional development from 1858 to 1935.
2. The importance of the Councils Act of 1861 and 1892.
3. Main provisions of the Minto-Morley Reforms, 1919.
4. The Salient features of the Act of 1919.
5. The Significance of the Government of India Act of 1935.

The history of constitutional development in India begins from the passing of the Regulating Act in 1773. The Pitt's India Act of 1784 and the successive Charter Acts from 1793 to 1853 form part of the constitutional changes under the East India Company's rule. The Revolt of 1857 brought about important changes in the British administration in India. The rule of the East India Company came to an end. The administration of India came under the direct control of the British Crown. These changes were announced in the Government of India Act of 1858. The 'Proclamation of Queen Victoria' assured the Indians a benevolent administration. Thereafter, important development had taken place in constitutional history of India as a result of the Indian National Movement.

### Government of India Act of 1858

The Government of India Act of 1858 was passed by the Parliament of England and received royal assent on 2<sup>nd</sup> August 1858. Following are the **main provisions of the Act**:

- East India **Company's rule came to an end** and the Indian administration came under the direct control of the Crown.
- In England, the **Court of Directors** and **Board of Control** were **abolished**. In their place came the **Secretary of State for India** and **India Council** were established. The Secretary of State would be a member of the British cabinet. Sir Charles Wood was made the first Secretary of State for India. India Council consisting of 15 members would assist him.
- The Governor General of India was also made the **Viceroy of India**. The first Viceroy of India was Lord

Canning.

■ All the previous treaties were accepted and honoured by the Act.

### Queen Victoria's Proclamation

On 1 November 1858 the Proclamation of Queen Victoria was announced by Lord Canning at Allahabad. This royal Proclamation was translated into Indian languages and publicly read in many important places. It announced the end of Company's rule in India and the Queen's assumption of the Government of India. It endorsed the treaty made by the Company with Indian princes and promised to respect their rights, dignity and honour. It assured the Indian people equal and impartial protection of law and freedom of religion and social practices. The Proclamation of Queen Victoria gave a practical shape to the Act of 1858.

### Indian Councils Act of 1861

The Indian Councils Act of 1861 increased the number of members in the Governor-General's executive Council from 4 to 5. Further the Governor-General's Executive Council was enlarged into a Central Legislative Council. Six to twelve "additional members" were to be nominated by the Governor-General. Not less than half of these members were to be non-officials. Thus a provision was made for the inclusion of Indians in the Legislative Council. The functions of these members were strictly limited to making legislation and they were forbidden from interfering in the matters of the Executive Council. They did not possess powers of administration and finance.

Legislative Councils were also established in the provinces. The number of additional members in the provinces was fixed between four to eight. So, this Act was an important constitutional development and the people of India came to be involved in the law making process. The mechanism of Indian legislation developed slowly and reinforced further by the Acts of 1892 and 1909.

### Indian Councils Act of 1892

The Indian Councils Act of 1892 was the first achievement of the Indian National Congress. It had increased the number of "additional members" in the Central Legislative Council. They were to be not less than 10 and not more than 16. It had also increased the proportion of non-officials - 6 officials and 10 non-officials. The members were allowed to discuss the budget and criticize the financial policy of the government. In the provinces also the number of additional members was increased with additional powers.

### Minto- Morley Reforms of 1909

The Indian Councils Act of 1909 was also known as Minto- Morley Reforms in the names of Lord Morley, the Secretary of State for India and Lord Minto, the Governor-General of India. Both were responsible for the passing of this Act. It was passed to win the support of the Moderates in the Congress. The important provisions of this Act were:

1. The number of "additional members" of the Central Legislative Council was increased to a maximum of 60. Elected members were to be 27 and among the remaining 33 nominated members not more than 28 were to be officials.
2. The principle of election to the councils was legally recognized. But **communal representation** was for the **first time introduced** in the interests of Muslims.

**Separate electorates** were provided for the Muslims.

3. The number of members in provincial legislative councils of major provinces was raised to 50.
4. The Councils were given right to discuss and pass resolutions on the Budget and on all matters of public interest. However, the Governor-General had the power to disallow discussion on the budget.
5. An Indian member was appointed for the first time to the Governor-General's Executive Council. Sir S. P. Sinha was- the first Indian to be appointed thus.
6. In Bombay and Madras, the number of members of the Executive Councils was raised from 2 to 4. The practice of appointing Indians to these Councils began.
7. Two Indians were also appointed to the India Council [in England].

The Minto- Morley reforms never desired to set up a parliamentary form of government in India. However, the Moderates welcomed the reforms as fairly liberal measures. The principle of separate electorates had ultimately led to the partition of India in 1947.

### Montague-Chelmsford Reforms of 1919

The political developments in India during the First World War such as the Home Rule Movement led to the August Declaration. On 20<sup>th</sup> August, 1917 Montague, the Secretary of State for India made a momentous declaration in the House of Commons. His declaration assured the introduction of responsible government in India in different stages. As a first measure the Government of India Act of 1919 was passed by the Parliament of England. This Act is popularly known as Montague-Chelmsford Reforms. At that time Lord Chelmsford was the Viceroy of India.

**The main features of the Act were:**

1. **Dyarchy** was introduced in the provinces. Provincial subjects were divided into "**Reserved Subjects**" such as police, jails, land revenue, irrigation and forests and "**Transferred Subjects**" such as education, local self-government, public health, sanitation, agriculture and industries. The Reserved subjects were to be administered by the Governor and his Executive Council. The Transferred subjects by the Governor and his ministers.
2. A bicameral (Two Chambers) legislature was set up at the centre. It consisted of the **Council of States** and the **Legislative Assembly**. The total member in the Legislative Assembly was to be a maximum of 145, out of which 105 were to be elected and the remaining nominated. In the Council of States there would be a maximum of 60 members out of which 34 were elected and the remaining nominated.
3. The salaries of the Secretary of State for India and his assistants were to be paid out of the British revenues. So far, they were paid out of the Indian revenues.
4. A High Commissioner for India at London was appointed.

The most important defect in this Act was the **division of powers** under the system of Dyarchy in the provinces.

### The Government of India Act of 1935

The Government of India Act of 1935 was passed on the basis of the report of the Simon Commission, the outcome of the Round Table Conferences and the White Paper issued by the British Government in 1933. This Act contained many important changes over the previous Act of 1919.

**Following were the salient features of this Act.**

1. Provision for the establishment of an **All India Federation** at the Centre, consisting of the Provinces of



British India and the Princely States. (It did not come into existence since the Princely States refused to give their consent for the union.)

2. Division of powers into three lists: Federal, Provincial and Concurrent.

3. Introduction of Dyarchy at the Centre. The Governor-General and his councillors administered the "Reserved subjects". The Council of Ministers were responsible for the "Transferred" subjects.

4. Abolition of Dyarchy and the introduction of Provincial Autonomy in the provinces. The Governor was made the head of the Provincial Executive but he was expected to run the administration on the advice of the Council of Ministers. Thus provincial government was entrusted to the elected Ministers. They were responsible to the popularly elected Legislative Assemblies.

5. Provincial Legislatures of Bengal, Madras, Bombay, United Provinces, Bihar and Assam were made bicameral.

6. Extension of the principle of Separate Electorates to Sikhs, Europeans, Indian Christians and Anglo Indians.

7. Establishment of a Federal Court at Delhi with a Chief Justice and 6 judges.

The working of the provincial autonomy was not successful. The Governors were not bound to accept the advice of the ministers. In reality, the real power in the Provincial Government was with the Governor. But, despite these drawbacks in the scheme, the Congress decided to take part in the elections to the Provincial Legislatures with the consideration that it was an improvement over the previous Acts.

In accordance with the provisions of the Government of India Act of 1935 elections to the Provincial Legislatures were held in February 1937. The Congress had virtually swept the polls. On 7 July 1937, after the Viceroy Lord Linlithgow, assured the Congress of his cooperation, the party formed its ministries in seven provinces.

# NCERT Class 6

## Geography (The Earth Our Habitat)

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 The Earth In The Solar System

The sun, the moon and all those objects shining in the night sky are called celestial bodies.

Some celestial bodies are very big and hot. They are made up of gases. They have their own heat and light, which they emit in large amounts. These celestial bodies are called stars. The sun is a star.

While watching the night sky, you may notice various patterns formed by different groups of stars. These are called constellations. Ursa Major or Big Bear is one such constellation. One of the most easily recognisable constellation is the Saptarishi (Sapta-seven, rishi-sages). It is a group of seven stars that forms a part of Ursa Major Constellation. Ask someone elder in your family or neighbourhood to show you more stars, planets and constellations in the sky.

In ancient times, people used to determine directions during the night with the help of stars. The North star indicates the north direction. It is also called the Pole Star. It always remains in the same position in the sky. We can locate the position of the Pole Star with the help of the Saptarishi. You will notice that, if an imaginary line is drawn joining the pointer stars and extended further, it will point to the Pole Star.

Some celestial bodies do not have their own heat and light. They are lit by the light of the stars. Such bodies are called planets. The word 'planet' comes from the Greek word "Planetai" which means 'wanderers'. The earth on which we live is a planet. It gets all its heat and light from the sun, which is our nearest star. If we look at the earth from a great distance, say the moon, it will appear to be shining just as the moon.

#### Interesting Fact

Jupiter, Saturn and Uranus have rings around them. These are belts of small debris. These rings may be seen from the earth with the help of powerful telescopes. The moon that we see in the sky is a satellite. It is a companion of our earth and moves round it. Like our earth, there are eight other planets that get heat and light from the sun. Some of them have their moons too.

#### The solar system

The sun, eight planets, satellites and some other celestial bodies known as asteroids and meteoroids form the solar system. We often call it a solar family, with the sun as its Head.

#### Word Origin

Many words used in a language may have been taken from some other language. Geography, for example, is an English word. It has its origin in Greek, which relates to the description of the earth. It is made of two Greek words, 'ge' meaning 'earth' and 'graphia' meaning 'writing'. Find out more about the earth.

Geology = Geo + logy = Study of the earth

Geometry = Geo + metry = Measurement of earth

Geoid = Geo + oid = resembling the shape or form of

the earth

#### The Sun

The sun is in the centre of the solar system. It is huge and made up of extremely hot gases. It provides the pulling force that binds the solar system. The sun is the ultimate source of heat and light for the solar system. But that tremendous heat is not felt so much by us because despite being our nearest star, it is far away from us. The sun is about 150 million km away from the earth.

#### Planets

There are eight planets in our solar system. In order of their distance from the sun, they are: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune. An easy way to memorise the name of the planets in order of their distance from the sun is: **My Very Efficient Mother Just Served Us Nuts.**

All the eight planets of the solar system move around the sun in fixed paths. These paths are elongated. They are called orbits. Mercury is nearest to the sun. It takes only about 88 days to complete one round along its orbit. Venus is considered as 'Earth's-twin' because its size and shape are very much similar to that of the earth. Till recently (August 2006), Pluto was also considered a planet. However, in a meeting of the International Astronomical Union, a decision was taken that Pluto like other celestial objects (Ceres, 2003 UB313) discovered in recent past may be called 'dwarf planets.'

#### The Earth

The earth is the third nearest planet to the sun. In size, it is the fifth largest planet. It is slightly flattened at the poles. That is why, its shape is described as a Geoid. Geoid means an earth-like shape. Conditions favourable to support life are probably found only on the earth. The earth is neither too hot nor too cold. It has water and air, which are very essential for our survival. The air has life-supporting gases like oxygen. Because of these reasons, the earth is a unique planet in the solar system. From the outer space, the earth appears blue because its two-thirds surface is covered by water. It is, therefore, called a *blue planet*.

**Do you know?** Light travels at the speed of about 300, 000 km per second. Yet, even with this speed, the light of the sun takes about eight minutes to reach the earth.

**A Satellite** is a celestial body that moves around the planets in the same way as the planets move around the sun. **A Human-made Satellite** is an artificial body. It is designed by scientists to gather information about the universe or for communication. It is carried by a rocket and placed in the orbit around the earth. Some of the Indian satellites in space are INSAT, IRS, EDUSAT, etc.?

#### The Moon

Our earth has only one satellite, that is, the moon. Its diameter is only one-quarter that of the earth. It appears so big because it is nearer to our planet than other celestial bodies. It is about 3, 84, 400 km away from us. Now you can compare the distance of the earth from the

sun and that from the moon. The moon moves around the earth in about 27 days. It takes exactly the same time to complete one spin. As a result, only one side of the moon is visible to us on the earth. The moon does not have conditions favourable for life. It has neither water nor air. It has mountains, plains and depressions on its surface. These cast shadows on the moon's surface. Look at the full moon and observe these shadows. You can see the full moon only once in about a month's time. It is Full moon night or Poornima. A fortnight later, you cannot see it at all. It is a New moon night or Amavasya. On this day, you can watch the night sky best, provided it is a clear night.

### Asteroids

Apart from the stars, planets and satellites, there are numerous tiny bodies which also move around the sun. These bodies are called asteroids. They are found between the orbits of Mars and Jupiter. Scientists are of the view that asteroids are parts of a planet which exploded many years back.

### Meteoroids

The small pieces of rocks which move around the sun are called meteoroids. Sometimes these meteoroids come near the earth and tend to drop upon it. During this process due to friction with the air they get heated up and burn. It causes a flash of light. Sometimes, a meteor without being completely burnt, falls on the earth and creates a hollow.

Do you see a whitish broad band, like a white glowing path across the sky on a clear starry night? It is a cluster of millions of stars. This band is the Milky Way galaxy. Our solar system is a part of this galaxy. In ancient India, it was imagined to be a river of light flowing in the sky. Thus, it was named Akash Ganga. A galaxy is a huge system of billions of stars, and clouds of dust and gases. There are millions of such galaxies that make the Universe. It is difficult to imagine how big the universe is. Scientists are still trying to find out more and more about it. We are not certain about its size but we know that all of us – you and I belong to this universe.

**Important Terms** **Full Moon Night:** A night when the moon is visible from the earth as a full sphere is called the Full Moon night, and it occurs once a month. **New Moon Night:** The fifteenth night after the Full Moon night, when the moon is not visible at all in the sky, is called the New Moon night.

**Celestial Body:** An object in the universe (but not on the earth) is said to be a celestial body. Examples are Sun, Earth, Moon, Stars, etc. **Star:** A celestial body that is characterised by being very hot and big, and made of gases is a star. A star typically has its own heat and light. **Inner Planets:** The Inner Planets are the planets that orbit around the sun between the sun and the asteroid belt, that is, are close to the sun. These are: Mercury, Venus, Earth and Mars. **Outer Planets:** The Outer Planets are the planets that orbit the sun beyond the asteroid belt, that is, are very far away from the sun. These are: Jupiter, Saturn, Uranus and Neptune. • **Asteroids** They are numerous tiny bodies which move around the sun between the orbits of Mars and Jupiter. The largest asteroid is the Ceres. • **Meteoroids** The small pieces of rocks which move around the sun are called meteoroids. Our solar system is a part of Milky Way galaxy. Milky Way galaxy was named Akash Ganga. There are millions of galaxies that make the Universe.

reference and lines to find out the location of places. An imaginary line running on the globe divides it into two equal parts. This line is known as the **equator**. The northern half of the earth is known as the Northern Hemisphere and the southern half is known as the Southern Hemisphere. They are both equal halves. Therefore, the equator is an imaginary circular line and is a very important reference point to locate places on the earth. All parallel circles from the equator up to the poles are called **parallelsof latitudes**. Latitudes are measured in degrees.

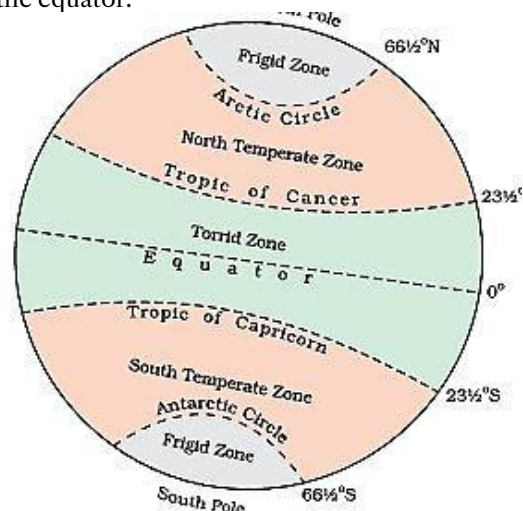
The equator represents the zero degree latitude. Since the distance from the equator to either of the poles is one-fourth of a circle round the earth, it will measure  $\frac{1}{4}$ th of 360 degrees, i.e.  $90^\circ$ . Thus, 90 degrees north latitude marks the North Pole and 90 degrees south latitude marks the South Pole. As such, all parallels north of the equator are called 'north latitudes.' Similarly all parallels south of the equator are called 'south latitudes.' As we move away from the equator, the size of the parallels of latitude decreases.

**Do you know?** By measuring the angle of the Pole Star from your place, you can know the latitude of your place.

### IMPORTANT PARALLELS OF LATITUDES

Besides the equator ( $0^\circ$ ), the North Pole ( $90^\circ\text{N}$ ) and the South Pole ( $90^\circ\text{S}$ ), there are four important parallels of latitudes—

(i) **Tropic of Cancer** ( $23\frac{1}{2}^\circ\text{N}$ ) in the Northern Hemisphere. (ii) **Tropic of Capricorn** ( $23\frac{1}{2}^\circ\text{S}$ ) in the Southern Hemisphere. (iii) **Arctic Circle** at  $66\frac{1}{2}^\circ$  north of the equator. (iv) **Antarctic Circle** at  $66\frac{1}{2}^\circ$  south of the equator.



### Important Latitudes and Heat Zones

#### HEAT ZONES OF THE EARTH

The mid-day sun is exactly overhead at least once a year on all latitudes in between the Tropic of Cancer and the Tropic of Capricorn. This area, therefore, receives the maximum heat and is called the **Torrid Zone**.

The mid-day sun never shines overhead on any latitude beyond the Tropic of Cancer and the Tropic of Capricorn. The angle of the sun's rays goes on decreasing towards the poles. As such, the areas bounded by the Tropic of Cancer and the Arctic Circle in the Northern Hemisphere, and the Tropic of Capricorn and the Antarctic Circle in the Southern Hemisphere, have moderate temperatures. These are, therefore, called **Temperate Zones**.

Areas lying between the Arctic Circle and the North Pole in the Northern Hemisphere and the Antarctic Circle and the South Pole in the Southern Hemisphere, are very cold. It is because here the sun does not rise

## Chapter 2

### Globe: Latitudes And Longitudes

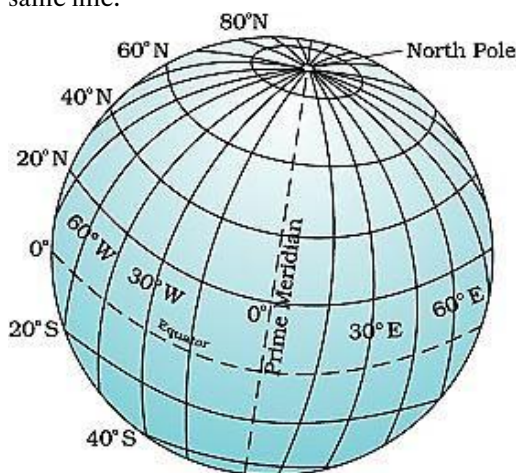
It is difficult to describe the location of a point on a sphere like the earth. Now the question arises as to how to locate a place on it? We need certain points of



much above the horizon. Therefore, its rays are always slanting and provide less heat. These are, therefore, called **Frigid Zones** (very cold).

### WHAT ARE LONGITUDES?

To fix the position of a place, it is necessary to know something more than the latitude of that place. Now, in order to locate places exactly, we must find out how far east or west these places are from a given line of reference running from the North Pole to the South Pole. These lines of references are called the meridians of longitude, and the distances between them are measured in 'degrees of longitude.' Each degree is further divided into minutes, and minutes into seconds. They are semi-circles and the distance between them decreases steadily polewards until it becomes zero at the poles, where all the meridians meet. Unlike parallels of latitude, all meridians are of equal length. Thus, it was difficult to number the meridians. Hence, all countries decided that the count should begin from the meridian which passed through Greenwich, where the British Royal Observatory is located. This meridian is called the **Prime Meridian**. Its value is  $0^\circ$  longitude and from it we count  $180^\circ$  eastward as well as  $180^\circ$  westward. The Prime Meridian and  $180^\circ$  meridian divide the earth into two equal halves, the Eastern Hemisphere and the Western Hemisphere. Therefore, the longitude of a place is followed by the letter E for the east and W for the west. It is, however, interesting to note that  $180^\circ$  East and  $180^\circ$  West meridians are on the same line.



Grid

### LONGITUDE AND TIME

The sun regularly rises and sets every day, and naturally, it is the best time-keeper throughout the world. Local time can be reckoned by the shadow cast by the sun, which is the shortest at noon and longest at sunrise and sunset. When the Prime Meridian of Greenwich has the sun at the highest point in the sky, all the places along this meridian will have mid-day or noon.

As the earth rotates from west to east, those places east of Greenwich will be ahead of Greenwich time and those to the west will be behind it. The rate of difference can be calculated as follows. The earth rotates  $360^\circ$  in about 24 hours, which means  $15^\circ$  an hour or  $1^\circ$  in four minutes. Thus, when it is 12 noon at Greenwich, the time at  $15^\circ$  east of Greenwich will be  $15 \times 4 = 60$  minutes, i.e., 1 hour ahead of Greenwich time, which means 1 p.m. But at  $15^\circ$  west of Greenwich, the time will be behind Greenwich time by one hour, i.e., it will be 11.00 a.m. Similarly, at  $180^\circ$ , it will be midnight when it is 12 noon at Greenwich.

At any place a watch can be adjusted to read 12 o'clock when the sun is at the highest point in the sky, i.e., when

it is mid-day. The time shown by such a watch will give the local time for that place. You can see that all the places on a given meridian of longitude have the same local time.

### WHY DO WE HAVE STANDARD TIME?

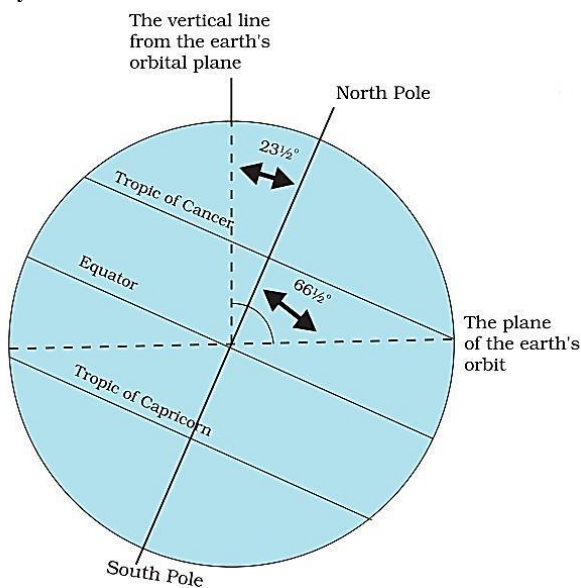
The local time of places which are on different meridians are bound to differ. For example, it will be difficult to prepare a time-table for trains which cross several longitudes. In India, for instance, there will be a difference of about 1 hour and 45 minutes in the local times of Dwarka in Gujarat and Dibrugarh in Assam. It is, therefore, necessary to adopt the local time of some central meridian of a country as the standard time for the country. In India, the longitude of  $82\frac{1}{2}^\circ$  E ( $82^\circ 30'$  E) is treated as the standard meridian. The local time at this meridian is taken as the standard time for the whole country. It is known as the Indian Standard Time (IST). India located east of Greenwich at  $82^\circ 30'$  E is 5 hours and 30 minutes ahead of GMT. So it will be 7:30 p.m. in India when it is 2:00 p.m. noon in London. Some countries have a great longitudinal extent and so they have adopted more than one standard time. For example, in Russia, there are as many as eleven standard times. The earth has been divided into twenty-four time zones of one hour each. Each zone thus covers  $15^\circ$  of longitude.

**Important Terms** **Globe:** Globe is a true model of the Earth in miniature form. It is exactly a true representation of the Earth. The latitudes and longitudes on a globe are very important in plotting the position the earth's surface. **Local Time:** Local time is the real time of a place according to its corresponding longitudes. **Grid:** The network of the parallels of latitude and meridians of longitude on the globe is known as Grid. **Longitudes:** They are the angular distance and are measured East or West from the Prime Meridian at Greenwich. They are North-South lines that encircle the earth and are used as references in mapping land. Globe is divided into 360 longitudes. **Prime Meridian:** The meridian which passes through Greenwich, where the British Royal Observatory is located, is called Prime Meridian. We can count  $180^\circ$  Eastwards as well as  $180^\circ$  Westward from it. The value of the Prime Meridian is  $0^\circ$  longitude. **Longitude and Time:** Longitude and time are closely related to each other. As the earth rotates from the West to East, the places East of Greenwich will be ahead of Greenwich time and those to the West will be behind it. **Standard Time:** There is a difference in the time between different regions of India. Therefore, to maintain uniformity in time throughout the country, it is necessary to adopt the local time of some central meridian as the standard time. **Standard Meridian in India:** India has its standard time at  $82\frac{1}{2}^\circ$  E meridian, which passes through Mirzapur. **Frigid Zones:** Beyond the Arctic Circle in the North and the Antarctic Circle in the South, the sun does not rise much above the horizon. Therefore, sunrays are always slanting and provide less heat; as a result, this zone is very cold. **Parallel of Latitudes:** All parallel circles from the Equator up to the poles are called parallel of latitudes. There are four important parallels of latitudes. **Tropic of Cancer:** It is at an angular distance of  $23\frac{1}{2}^\circ$  N from the Equator. On 21st June, the sun is directly over the Tropic of Cancer. **Tropic of Capricorn:** It is at an angular distance of  $23^\circ 30'$  S from the Equator. On 22nd December, the sun is over this latitude. **Arctic Circle:** It is at a distance of  $66\frac{1}{2}^\circ$  N from the Equator. On 21st June, this parallel receives 24 hours daylight. **Arctic Circle Tropic of Cancer Equator Tropic of Capricorn Antarctic Circle Frigid Temperate Torrid Torrid Temperate Frigid Zones Antarctic Circle:** It is at a distance of  $66\frac{1}{2}^\circ$  S from the Equator. On 22nd December, this parallel receives 24 hours daylight. **Torrid Zone:** This zone spreads across the Equator and is the hottest part of the world. It lies between the Tropic of Cancer and Tropic of Capricorn ( $23\frac{1}{2}^\circ$  N). The mid-day sun is exactly overhead at least once during a solar year. **Temperate Zone:** There are two temperate zones: North Temperate Zone and South Temperate Zone.

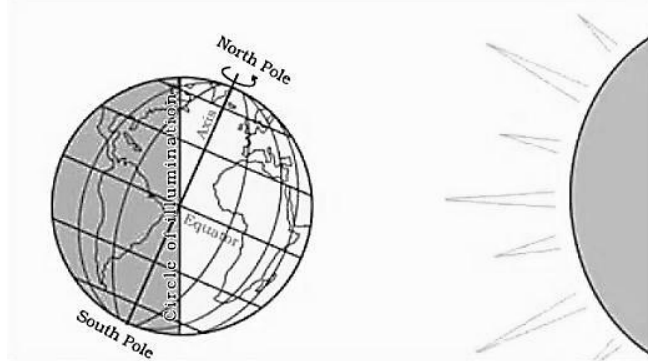
## Chapter 3 Motions Of The Earth

As you know that the earth has two types of motions, namely rotation and revolution. **Rotation** is the movement of the earth on its axis. The movement of the earth around the sun in a fixed path or orbit is called **Revolution**.

The axis of the earth which is an imaginary line, makes an angle of  $66\frac{1}{2}^\circ$  with its **orbital plane**. The plane formed by the orbit is known as the orbital plane. The earth receives light from the sun. Due to the spherical shape of the earth, only half of it gets light from the sun at a time. The portion facing the sun experiences day while the other half away from the sun experiences night. The circle that divides the day from night on the globe is called the **circle of illumination**. This circle does not coincide with the axis. The earth takes about 24 hours to complete one rotation around its axis. The period of rotation is known as the *earthday*. This is the daily motion of the earth.



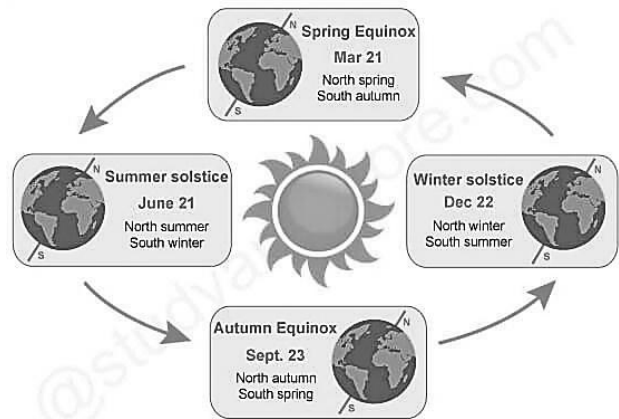
*Inclination of the Earth's axis and the orbital plane*



*Day and Night on the Earth due to rotation*

*What would happen if the earth did not rotate?* The portion of the earth facing the sun would always experience day, thus bringing continuous warmth to the region. The other half would remain in darkness and be freezing cold all the time. Life would not have been possible in such extreme conditions.

The second motion of the earth around the sun in its orbit is called **revolution**. It takes  $365\frac{1}{4}$  days (one year) to revolve around the sun. We consider a year as consisting of 365 days only and ignore six hours for the sake of convenience.



### *Revolution of the Earth and Seasons*

Six hours saved every year are added to make one day (24 hours) over a span of four years. This surplus day is added to the month of February. Thus every fourth year, February is of 29 days instead of 28 days. Such a year with 366 days is called a **leap year**. Find out when will the next leap year be?

The earth is going around the sun in an **elliptical orbit**. Notice that throughout its orbit, the earth is inclined in the same direction. A year is usually divided into summer, winter, spring and autumn seasons. Seasons change due to the change in the position of the earth around the sun.

Look at the. You will see that on 21<sup>st</sup> June, the Northern Hemisphere is tilted towards the sun. The rays of the sun fall directly on the Tropic of Cancer. As a result, these areas receive more heat. The areas near the poles receive less heat as the rays of the sun are slanting. The North Pole is inclined towards the sun and the places beyond the Arctic Circle experience continuous daylight for about six months. Since a large portion of the Northern Hemisphere is getting light from the sun, it is summer in the regions north of the equator. The longest day and the shortest night at these places occur on 21<sup>st</sup> June. At this time in the Southern Hemisphere all these conditions are reversed. It is winter season there. The nights are longer than the days. This position of the earth is called the **Summer Solstice**.

On 22<sup>nd</sup> December, the Tropic of Capricorn receives direct rays of the sun as the South Pole tilts towards it. As the sun's rays fall vertically at the Tropic of Capricorn ( $23\frac{1}{2}^\circ$  S), a larger portion of the Southern Hemisphere gets light. Therefore, it is summer in the Southern Hemisphere with longer days and shorter nights. The reverse happens in the Northern Hemisphere. This position of the earth is called the **Winter Solstice**. Do you know that Christmas is celebrated in Australia in the summer season?

On 21<sup>st</sup> March and September 23<sup>rd</sup>, direct rays of the sun fall on the equator. At this position, neither of the poles is tilted towards the sun; so, the whole earth experiences equal days and equal nights. This is called an **equinox**.

On 23<sup>rd</sup> September, it is autumn season in the Northern Hemisphere and spring season in the Southern Hemisphere. The opposite is the case on 21<sup>st</sup> March, when it is spring in the Northern Hemisphere and autumn in the Southern Hemisphere.

Thus, you find that there are days and nights and changes in the seasons because of the rotation and revolution of the earth respectively.

**Important Terms** **Rotation:** Rotation is the movement of the Earth in a circular motion around the axis line. **Day and night:** Day and night occur at the Earth's surface due to its

rotation. The angle of tilt, i.e.,  $66\frac{1}{2}^\circ$  decides whether the North Pole or the South Pole will experience day. **Impact of Rotation:** day and night, which are demarcated by the circle of illumination, occur due to the rotation of the Earth. **Impact of Revolution:** The revolution of the Earth is responsible for bringing about changes in the season. **Motions of the Earth:** The movements of the Earth are generally known as Motions of the Earth. Generally, the motions of the Earth are divided into two categories: (i) Rotation (ii) Revolution **Circle of Illumination:** The circle which divides day from night on the globe is called the Circle of Illumination. **Elliptical Plane:** An Elliptical Plane is a plane having an approximately ellipsoidal shape. The motion of planets in elliptical plane is predominantly radial. **Revolution:** The movement of the Earth around the sun in a fixed path or orbit is called Revolution. **Orbital Plane:** The orbit of a planet around the Sun is an ellipse, with the Sun in one of the focal points of the ellipse. Therefore, the orbit lies in a plane called the Orbital Plane. **Inclination of the Earth's axis and the orbital plane** The different seasons, namely, winter, summer, autumn and spring are the result of the revolution of the earth. The different positions of the earth such as Summer Solstice, Winter Solstice and Equinoxes are explained as follows: (i) **Summer Solstice:** On 21st June, the Northern Hemisphere is tilted towards the Sun. The rays of the Sun fall directly on the Tropic of Cancer. Since a large portion of the Northern Hemisphere is getting light from the Sun, it is summer in the Northern Hemisphere. This position of the Earth is called Summer Solstice. (ii) **Winter Solstice:** On 22nd December, the Tropic of Capricorn receives direct rays of the Sun as the South Pole tilts towards it. As the sunrays fall vertically at the Tropic of Capricorn ( $23\frac{1}{2}^\circ$  S), a larger portion of the Southern Hemisphere gets light. So, it means more heat and hence it is summer in the Southern Hemisphere. This position of the Earth is called Winter Solstice. (iii) **Equinox:** On 21st March and September 23rd, the sunrays fall directly on the Equator. At this position, neither of the poles is tilted towards the Sun and so, the whole Earth experiences equal days and equal nights. This is called an Equinox.

## Chapter 4 Maps

- A globe can be useful when we want to study the Earth as a whole.
- A map is a representation or a drawing of the Earth's surface or a part of it drawn on a flat surface according to a scale.
- When many maps are put together we get an Atlas.
- Physical maps show natural features of the Earth.
- Political maps show different boundaries of different countries and states.
- Thematic maps focus on specific information.
- There are three components of maps—distance, direction and symbol.

### Distance

- Scale is the ratio between the actual distance on the ground and the distance shown on the map.
- If you know the scale, you will be able to calculate the distance between any two places on a map.
- When large areas like continents or countries are to be shown on a paper, then we use a small scale map.
- When a small area like your village or town is to be shown on paper, then we use a large scale map.
- Large scale maps give more information than small scale maps.

### Direction

- There are four major directions, North, South, East and West. They are called cardinal points.
- We can locate any places more accurately with the help of intermediate directions like: (a) North-East (NE) (b) South-East (SE) (c) South- West (SW) (d) North-

West (NW)

- We can find out the direction of a place with the help of a magnetic compass.

### Symbols

- The conventional symbols give a lot of information in a limited space.
- Blue colour is used for showing water bodies, brown for mountains, yellow for plateau and green is used for plains.

Railway Line : Broad gauge, Metre gauge, Railway station	
Roads : Metalled, Unmetalled	
Boundary : International, State, District,	
River, Well, Tank, Canal, Bridge	
Temple, Church, Mosque, Chhatri	
Post Office, Post & Telegraph Office, Police Station	
Settlement, Graveyard	
Trees, Grass	

### Conventional Symbols

### Sketch

- A sketch is a drawing mainly based on memory and spot observation and not to scale.
- A rough drawing is drawn without scale is called a sketch map.

### Plan

- A plan is a drawing of a small area on a large scale.
- There are certain things which we may sometimes want to know, for example, the length and breadth of a room.

## Chapter 5 Major Domains Of The Earth

As you have read in the first chapter, the earth is the only planet which has life. Human beings can live here because the life sustaining elements of land, water and air are present on the earth. The surface of the earth is a complex zone in which three main components of the environment meet, overlap and interact. The solid portion of the earth on which we live is called the **Lithosphere**. The gaseous layers that surround the earth, is the **Atmosphere**, where oxygen, nitrogen, carbondioxide and other gases are found. Water covers a very big area of the earth's surface and this area is called the **Hydrosphere**. The Hydrosphere comprises water in all its forms, that is, ice, water and water vapour. The **Biosphere** is the narrow where we find land, water and air together, which contains all forms of life.

### LITHOSPHERE

The solid portion of the earth is called the *Lithosphere*. It comprises the rocks of the earth's crust and the thin layers of soil that contain nutrient elements which sustain organisms.

There are two main divisions of the earth's surface. The large landmasses are known as the **continents** and the huge water bodies are called the **ocean basins**. All the oceans of the world are connected with one another. The level of seawater remains the same everywhere. Elevation of land is measured from the level of the sea, which is taken as zero. The highest mountain peak Mt. Everest is 8, 848 metres above the sea level. The greatest depth of 11, 022 metres is recorded at Mariana Trench in the Pacific Ocean. Could you imagine that depth of sea is much more than the highest point?

**Do you know?** Edmund Hillary (New Zealand) and Tenzing



Norgay Sherpa (India) were the first men to climb the highest mountain peak Mt. Everest on the planet earth on 29th May, 1953. Junko Tabei (Japan) was the first woman to reach the summit on 16th May, 1975. The first Indian woman to climb the highest peak on 23rd May, 1984 was Bachendri Pal.

## Continents

There are seven major continents. These are separated by large water bodies. These continents are – Asia, Europe, Africa, North America, South America, Australia and Antarctica. Look at the map of the world () and notice that the greater part of the land mass lies in the Northern Hemisphere.

**Asia** is the largest continent. It covers about one-third of the total land area of the earth. The continent lies in the Eastern Hemisphere. The Tropic of Cancer passes through this continent. Asia is separated from Europe by the Ural mountains on the west (). The combined landmass of Europe and Asia is called the *Eurasia* (Europe + Asia).

**Europe** is much smaller than Asia. The continent lies to the west of Asia. The Arctic Circle passes through it. It is bound by water bodies on three sides. Look at the map of the world and locate it.

**Africa** is the second largest continent after Asia. The Equator or 0° latitude runs almost through the middle of the continent. A large part of Africa lies in the Northern Hemisphere. It is the only continent through which the Tropic of Cancer, the Equator and the Tropic of Capricorn pass.

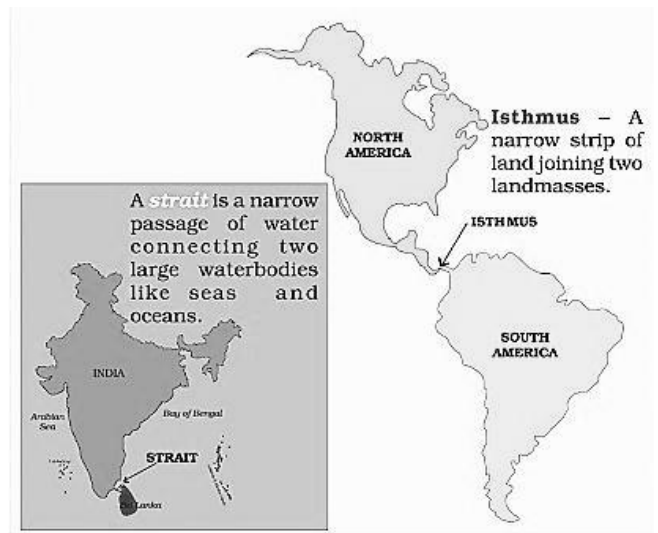
The Sahara Desert, the world's largest hot desert, is located in Africa. The continent is bound on all sides by oceans and seas. World's longest river the **Nile**, flows through Africa. Notice where the Equator, the Tropic of Cancer and the Tropic of Capricorn pass in the map of Africa.

**North America** is the third largest continent of the world. It is linked to South America by a very narrow strip of land called the Isthmus of Panama. The continent lies completely in the Northern and Western Hemisphere. Three oceans surround this continent. Can you name these oceans?

**South America** lies mostly in the Southern Hemisphere. Which two oceans surround it on the east and the west? The Andes, world's longest mountain range, runs through its length from north to south. South America has the world's largest river, the Amazon.

**Australia** is the smallest continent that lies entirely in the Southern Hemisphere. It is surrounded on all sides by the oceans and seas. It is called an island continent.

**Antarctica**, completely in the Southern Hemisphere, is a huge continent. The South Pole lies almost at the centre of this continent. As it is located in the South Polar Region, it is permanently covered with thick ice sheets. There are no permanent human settlements. Many countries have research stations in Antarctica. India also has research stations there. These are named as **Maitri** and **Dakshin Gangotri**.



## Isthmus and Strait

### HYDROSPHERE

The earth is called the *blue planet*. More than 71 per cent of the earth is covered with water and 29 per cent is with land. Hydrosphere consists of water in all its forms. As running water in oceans and rivers and in lakes, ice in glaciers, underground water and the water vapour in atmosphere, all comprise the hydrosphere.

More than 97% of the Earth's water is found in the oceans and is too salty for human use. A large proportion of the rest of the water is in the form of icesheets and glaciers or under the ground and a very small percentage is available as fresh water for human use. Hence, despite being a 'blue planet' we face a shortage of water

### Oceans

Oceans are the major part of hydrosphere. They are all interconnected. The ocean waters are always moving. The three chief movements of ocean waters are the waves, the tides and the ocean currents. The four major oceans are the Pacific Ocean, the Atlantic Ocean, the Indian Ocean and the Arctic Ocean, in order of their size.

The Pacific Ocean is the largest ocean. It is spread over one-third of the earth. Mariana Trench, the deepest part of the earth, lies in the Pacific Ocean. The Pacific Ocean is almost circular in shape. Asia, Australia, North and South Americas surround it. Look at the map and find out the location of the continents around the Pacific Ocean.

The Atlantic Ocean is the second largest Ocean in the world. It is 'S' shaped. It is flanked by the North and South Americas on the western side, and Europe and Africa on the eastern side. The coastline of Atlantic Ocean is highly *indented*. This irregular and indented coastline provides ideal location for natural harbours and ports. From the point of view of commerce, it is the busiest Ocean.

The Indian Ocean is the only ocean named after a country, that is, India. The shape of ocean is almost triangular. In the north, it is bound by Asia, in the west by Africa and in the east by Australia.

The Arctic Ocean is located within the Arctic Circle and surrounds the North Pole. It is connected with the Pacific Ocean by a narrow stretch of shallow water known as Bering strait. It is bound by northern coasts of North America and Eurasia.

### ATMOSPHERE

The earth is surrounded by a layer of gas called the **atmosphere**. This thin blanket of air is an integral and

important aspect of the planet. It provides us with the air we breathe and protects us from the harmful effects of sun's rays.

The atmosphere extends up to a height of about 1,600 kilometres. The atmosphere is divided into five layers based on composition, temperature and other properties. These layers starting from earth's surface are called the troposphere, the stratosphere, the mesosphere, the thermosphere and the exosphere.

The atmosphere is composed mainly of nitrogen and oxygen, which make up about 99 per cent of clean, dry air. Nitrogen 78 per cent, oxygen 21 per cent and other gases like carbon dioxide, argon and others comprise 1 per cent by volume. Oxygen is the breath of life while nitrogen helps in the growth of living organisms. Carbon dioxide, though present in minute amount, is important as it absorbs heat radiated by the earth, thereby keeping the planet warm. It is also essential for the growth of plants.

The density of the atmosphere varies with height. It is maximum at the sea level and decreases rapidly as we go up. You know, the climbers experience problems in breathing due to this decrease in the density of air. They have to carry with them oxygen cylinders to be able to breathe at high altitudes. The temperature also decreases as we go upwards. The atmosphere exerts pressure on the earth. This varies from place to place. Some areas experience high pressure and some areas low pressure. Air moves from high pressure to low pressure. Moving air is known as wind.

### BIOSPHERE - THE DOMAIN OF LIFE

The **biosphere** is the narrow zone of contact between the land, water and air. It is in this zone that life, that is unique to this planet, exists. There are several species of organisms that vary in size from microbes and bacteria to huge mammals. All the living organisms including humans are linked to each other and to the biosphere for survival.

The organisms in the biosphere may broadly be divided into the plant kingdom and the animal kingdom. The three domains of the earth interact with each other and affect each other in some way or the other. For example, cutting of forests for fulfilling our needs of wood, or clearing land for agriculture may lead to fast removal of soil from slopes. Similarly earth's surface may be changed due to natural calamities like earthquakes. For example, there could be submergence of land, as happened in the case of Tsunami recently. Parts of Andaman & Nicobar islands were submerged under water. Discharge of waste material into lakes and rivers makes the water unsuitable for human use. It also damages other forms of life.

Emission from industries, thermal power plants and vehicles, pollute the air. Carbon dioxide (CO<sub>2</sub>) is an important constituent of air. But increase in the amount of CO<sub>2</sub> leads to increase in global temperatures. This is termed as global warming. There is thus, a need to limit the use of resources of the earth to maintain the balance of nature between the domains of the lithosphere, the atmosphere and the hydrosphere.

**Important Terms Layers of Atmosphere:** The atmosphere is divided into five layers based on composition, temperature and other properties. **Biosphere:** The biosphere is the narrow zone of contact between land, water and air. **Lithosphere:** The solid portion of the Earth is called lithosphere. It comprises of the rocks of the earth's crust and thin layers of soil. **Atmosphere:** In Greek language, 'atmos' means 'vapour'. The Earth is surrounded by a layer of gas called atmosphere, which extends upto a height of 1,600 kilometres. It provides us with the air we breathe and protects us from the harmful

sunrays. **Composition:** The atmosphere is composed mainly of nitrogen and oxygen, which makes up about 99% of the clean and dry air. Nitrogen 78%, oxygen 21% and other gases like carbon dioxide, argon and others comprise 1% by volume. **Strait:** A strait is a narrow passage of water connecting two large water bodies like seas and oceans. For example, the Strait between India and Sri Lanka is known as the Palk Strait.

## Chapter 6 Major Landforms Of The Earth

You will notice that the surface of the earth is not the same everywhere. The earth has an infinite variety of landforms. Some parts of the lithosphere may be rugged and some flat.

**Do you know?** A hill is a land surface that rises higher than the surrounding area. Generally, a steep hill with an elevation of more than 600 metres is termed as a mountain. Name some mountains with a height of more than 8,000 metres.

These landforms are a result of two processes. You will be amazed to know that the ground you are standing on is slowly moving. Within the earth, a continuous movement is taking place. The first, or the **internal process** leads to the upliftment and sinking of the earth's surface at several places.

The second, or the **external process** is the continuous wearing down and rebuilding of the land surface. The wearing away of the earth's surface is called **erosion**. The surface is being lowered by the process of erosion and rebuilt by the process of **deposition**. These two processes are carried out by running water, ice and wind. Broadly, we can group different landforms depending on elevation and slope as **mountains, plateaus and plains**.

### MOUNTAINS

A **mountain** is any natural elevation of the earth surface. The mountains may have a small summit and a broad base. It is considerably higher than the surrounding area. Some mountains are even higher than the clouds. As you go higher, the climate becomes colder.

In some mountains, there are permanently frozen rivers of ice. They are called **glaciers**. There are some mountains you cannot see as they are under the sea. Because of harsh climate, less people live in the mountain areas. Since the slopes are steep, less land is available for farming.

Mountains may be arranged in a line known as **range**. Many mountain systems consist of a series of parallel ranges extending over hundreds of kilometres. The Himalayas, the Alps and the Andes are mountain ranges of Asia, Europe and South America, respectively. Mountains vary in their heights and shape.

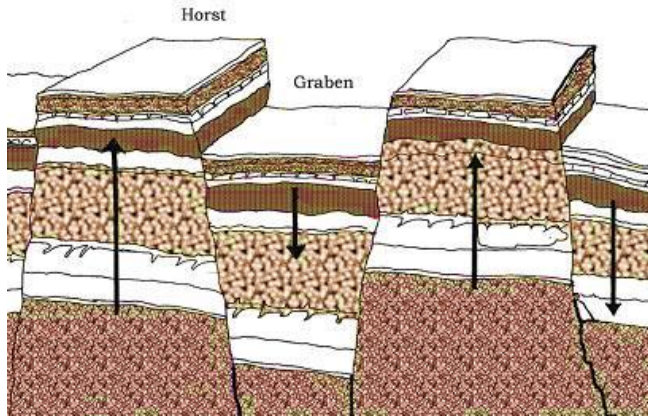
**Do you know?** Mauna Kea (Hawaii) in the Pacific Ocean is an undersea mountain. It is higher than Mount Everest being 10,205 metres high.

There are three types of mountains- **Fold Mountains, Block Mountains and the Volcanic Mountains**. The Himalayan Mountains and the Alps are young fold mountains with rugged relief and high conical peaks. The Aravali range in India is one of the oldest fold mountain systems in the world. The range has considerably worn down due to the processes of erosion. The Appalachians in North America and the Ural mountains in Russia have rounded features and low elevation. They are very old fold mountains.

**Block Mountains** are created when large areas are broken and displaced vertically. The uplifted blocks are termed as **horsts** and the lowered blocks are called **graben**. The Rhine valley and the Vosges mountain in



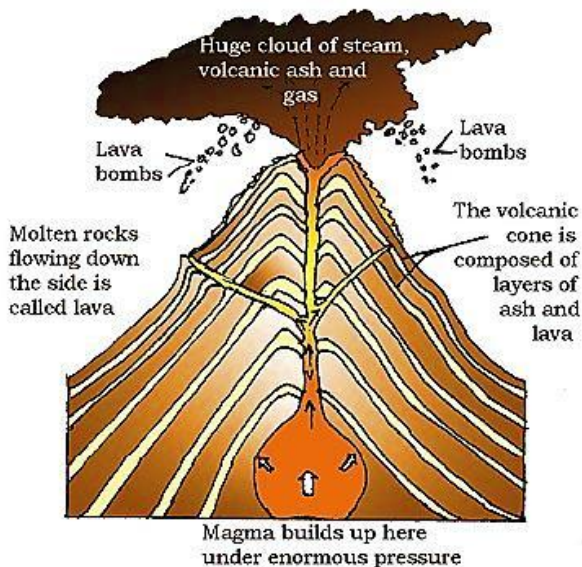
Europe are examples of such mountain systems. Locate them on the world map in the atlas and find out some more examples of this type of landforms.



#### A Block Mountain

Volcanic mountains are formed due to **volcanic activity**. Mt. Kilimanjaro in Africa and Mt. Fujiyama in Japan are examples of such mountains.

Mountains are very useful. The mountains are a **storehouse** of water. Many rivers have their source in the **glaciers** in the mountains. Reservoirs are made and the water is harnessed for the use of people. Water from the mountains is also used for irrigation and generation of hydro-electricity. The **river valleys** and **terraces** are ideal for cultivation of crops. Mountains have a rich variety of **flora** and **fauna**. The forests provide fuel, fodder, shelter and other products like gum, raisins, etc. Mountains provide an idyllic site for tourists. They visit the mountains for their scenic beauty. Several sports like paragliding, hang gliding, river rafting and skiing are popular in the mountains. Can you name some places in the Himalayas associated with these sports?



#### A Volcanic Mountain

#### PLATEAUS

A plateau is an elevated flat land. It is a flat-topped **table land** standing above the surrounding area. A plateau may have one or more sides with steep slopes. The height of plateaus often varies from few hundred metres to several thousand metres. Plateaus, like mountains may be young or old. The Deccan plateau in India is one of the oldest plateaus. The East African Plateau in Kenya, Tanzania and Uganda and the Western plateau of Australia are other examples. The Tibet plateau is the highest plateau in the world with a height of 4, 000 to 6,

000 metres above the mean sea level.

Plateaus are very useful because they are rich in mineral deposits. As a result, many of the mining areas in the world are located in the plateau areas. The African plateau is famous for gold and diamond mining. In India huge reserves of iron, coal and manganese are found in the Chhotanagpur plateau.

In the plateau areas, there may be several waterfalls as the river falls from a great height. In India, the Hundru falls in the Chhotanagpur plateau on the river Subarnarekha and the Jog falls in Karnataka are examples of such waterfalls. The lava plateaus are rich in black soil that are fertile and good for cultivation. Many plateaus have scenic spots and are of great attraction to tourists.

#### PLAINS

Plains are large stretches of flat land. They are, generally, not more than 200 metres above mean sea level. Some plains are extremely level. Others may be slightly rolling and undulating. Most of the plains are formed by rivers and their tributaries. The rivers flow down the slopes of mountains and erode them. They carry forward the eroded material. Then they deposit their load consisting of stones, sand and silt along their courses and in their valleys. It is from these deposits that plains are formed.

Generally, plains are very fertile. Construction of transport network is easy. Thus, these plains are very thickly-populated regions of the world. Some of the largest plains made by the rivers are found in Asia and North America. For example, in Asia, these plains are formed by the Ganga and the Brahmaputra in India and the Yangtze in China.

Plains are the most useful areas for human habitation. There is great concentration of people as more flat land is available for building houses, as well as for cultivation. Because of fertile soils, the land is highly productive for cultivation. In India too, the Indo-Gangetic plains are the most densely populated regions of the country.

**Important Terms Mountains:** Mountain is any natural elevation of the Earth's surface. Mountains may have a small summit and a broad base. There are three types of mountains:

(i) Fold Mountains (ii) Block Mountains (iii) Volcanic Mountains **Glaciers:** The permanently frozen rivers of ice in the mountains are known as Glaciers. **Fold Mountains:** These mountains are formed by the crust which has been uplifted and folded by compressional forces. For example, Himalayas in Asia, the Appalachians in North America and the Ural Mountains in Russia. **Block Mountains:** These are steep-sided mountains which are formed when large areas are broken and displaced vertically. For example, the Rhine Valley and Vosges Mountain in Europe. **Volcanic Mountains:** These mountains are formed due to the deposition and solidification of volcanic lava. For example, Mt. Kilimanjaro in Africa and Mt. Fujiyama in Japan. These mountains are a storehouse of biodiversity and provide sufficient water for domestic and irrigational purposes. **Horst:** The uplifted block between two normal faults is known as Horst. **Graben:** The lowered block between two normal faults is known as Graben. **Plateau:** It is a flat-topped tableland that stands above the surrounding areas. It is also known as High Plateau or Tableland. For example, for Deccan Plateau in India, the East African Plateau in Kenya and the Western Plateau of Australia. Plateaus are rich in mineral deposits. **Plains:** Plains are large areas of land with relatively low relief. They are the most densely populated regions of the world. For example, the Ganga and Brahmaputra plains. They are the most useful areas for human habitation. **Landforms:** The surface of the Earth is not the same everywhere. Some parts of lithosphere may be rugged and some may be flat. Landforms are the natural features of the Earth's surface. Valleys, mountains, plains and hills are examples of landforms. **Formation of Landforms:** Landforms



are shaped by two processes which take place on the Earth's crust. These processes include: (i) Internal Process (ii) External Process **Formation of Plains:** The rivers form plains by eroding the slopes of mountains and carrying forward the eroded materials. The eroded materials, consisting of stones and sand is deposited along the course of rivers as well as in valleys, forming the fertile plains.

## Chapter 7 Our Country – India

India is a country of vast geographical expanse. In the north, it is bound by the lofty **Himalayas**. The **Arabian Sea** in the west, the **Bay of Bengal** in the east and the **Indian Ocean** in the south, wash the shores of the Indian peninsula.

The peninsula is a piece of land that is surrounded by water on three sides. India has an area of about 3.28 million sq. km. The north-south extent from Kashmir to Kanyakumari is about 3,200 km. And the east-west extent from Arunachal Pradesh to Kuchchh is about 2,900 km. The lofty mountains, the Great Indian Desert, the Northern Plains, the uneven plateau surface and the coasts and islands present a diversity of landforms. There is a great variety in the climate, vegetation, wildlife as well as in the language and culture. In this diversity, we find unity that is reflected in traditions that bind us as one nation. India has a population of more than one hundred twenty crores since the year 2011. It is the second most populous country of the world after China.

**Do you know?** Large countries which stretch extensively from east to west do not have a single Standard Time for the whole country. The USA and Canada have seven and six time zones respectively. Do you remember how many time zones are there in Russia?

### Locational Settings

India is located in the northern hemisphere. The Tropic of Cancer (23°30'N) passes almost halfway through the country. From south to north, main land of India extends between 8°4'N and 37°6'N latitudes. From west to east, India extends between 68°7'E and 97°25'E longitudes. If we divide the world into eastern and western hemispheres, which hemisphere would India belong to? Due to great longitudinal extent of about 29°, there could be a wide difference in local time of places located at two extreme points of India. As such, the difference between these two points would be of about two hours. As you have learnt earlier, the local time changes by four minutes for every one degree of longitude. The sun rises about two hours earlier in the east (Arunachal Pradesh) than in the west (Gujarat). You have already read earlier, why the local time of longitude of 82°30'E has been taken as the Indian Standard Time. This meridian or longitude is also termed as the Standard Meridian of India.

### India's Neighbours

There are seven countries that share land boundaries with India. How many of these countries do not have access to any ocean or sea?

Across the sea to the south, lie our island neighbours—Sri Lanka and Maldives. Sri Lanka is separated from India by the *Palk Strait*.

India is a vast country. For administrative purposes, the country is divided into 29 States and 7 Union Territories.

**Alluvial deposits:** These are very fine soils, brought by rivers and deposited in the river basins.

**Tributary:** A river or stream which contributes its water to a main river by discharging it into main river

from either side.

Delhi is the national capital. The states have been formed mainly on the basis of languages. Rajasthan is the *largest state* and Goa is the *smallest state* in terms of area. The states are further divided into districts.

### Physical Divisions

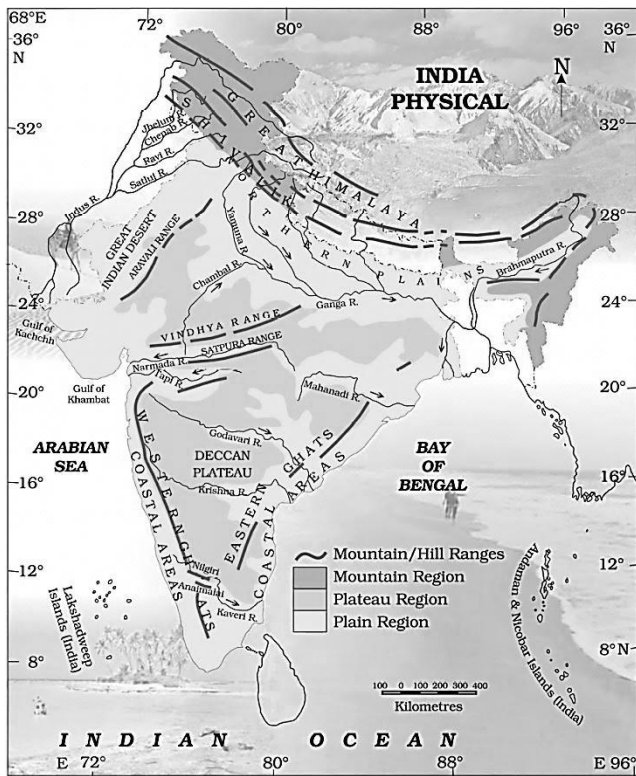
India is marked by a diversity of physical features such as mountains, plateaus, plains, coasts and islands. Standing as sentinels in the north are the lofty snow-capped Himalayas. *Him+alay* mean 'the abode of snow'. The Himalayan mountains are divided into three main parallel ranges. The northernmost is the **Great Himalaya** or **Himadri**. The world's highest peaks are located in this range. **Middle Himalaya** or **Himachal** lies to the south of Himadri. Many popular hill stations are situated here. Find out the names of five hill stations. The **Shiwalik** is the southernmost range.

**Do you know?** The *Ganga* and the *Brahmaputra* form the world's largest *delta*, the *Sundarbans delta*. The delta is triangular in shape. It is an area of land formed at the *mouth of the river* (Where rivers enter the sea, that point is called the mouth of the river).

The **Northern Indian plains** lie to the south of the Himalayas. They are generally level and flat. These are formed by the alluvial deposits laid down by the rivers—the Indus, the Ganga, the Brahmaputra and their tributaries. These river plains provide fertile land for cultivation. That is the reason for high concentration of population in these plains.

In the western part of India lies the **Great Indian desert**. It is a dry, hot and sandy stretch of land. It has very little vegetation.

To the south of northern plains lies the **Peninsular plateau**. It is triangular in shape. The relief is highly uneven. This is a region with numerous hill ranges and valleys. Aravali hills, one of the oldest ranges of the world, border it on the north-west side. The **Vindhyas** and the **Satpuras** are the important ranges. The rivers **Narmada** and **Tapi** flow through these ranges. These are west-flowing rivers that drain into the Arabian Sea. The **Western Ghats** or **Sahyadris** border the plateau in the west and the **Eastern Ghats** provide the eastern boundary. While the Western Ghats are almost continuous, the Eastern Ghats are broken and uneven. The plateau is rich in minerals like coal and iron-ore.



### India: Physical Divisions

To the West of the Western Ghats and the East of Eastern Ghats lie the **Coastal plains**. The western coastal plains are very narrow. The eastern Coastal plains are much broader.

There are a number of east flowing rivers. The rivers Mahanadi, Godavari, Krishna and Kaveri drain into the Bay of Bengal. These rivers have formed fertile deltas at their mouth. The Sunderban delta is formed where the Ganga and Brahmaputra flow into the Bay of Bengal.

**Do you know?** Corals are skeletons of tiny marine animals called **Polyps**. When the living polyps die, their skeletons are left. Other polyps grow on top of the hard skeleton which grows higher and higher, thus forming the coral islands.

Two groups of islands also form part of India.

**Lakshadweep Islands** are located in the Arabian Sea. These are coral islands located off the coast of Kerala.

The **Andaman** and the **Nicobar Islands** lie to the southeast of the Indian mainland in the Bay of Bengal. Do you know which group of islands were affected by the Tsunami in 2004? Find out through newspaper reports and by speaking to people how in different ways people faced this challenge when Tsunami struck the Indian coast. Tsunami is a huge sea wave generated due to an earthquake on the sea floor.

**Important Terms** **Peninsula**: Peninsula is a piece of land that is surrounded by water on three sides, but is still attached to the mainland. **Tributary**: A river or stream that contributes its water to a main river by discharging it into the main river from either side is known as a Tributary. **Delta**: It is a triangular area of land formed at the mouth of a river. The Ganga and the Brahmaputra together form the world's largest delta called the Sunderban Delta. **Coral Islands**: Corals are the skeletons of tiny marine animals called Polyps. When other polyps grow and die on top of corals, then its height increases and coral islands are formed. Lakshadweep islands are an example of coral islands. **Alluvial Deposits**: It refers to the very fine soil, brought by rivers and deposited in the river basins.

atmosphere. It includes changes in temperature, rainfall and sunshine etc. For example, as such it may be hot or cold; sunny or cloudy; windy or calm. While Climate is long term changes in the atmosphere.

Broadly, the major seasons recognised in India are:

- Cold Weather Season (Winter) December to February
- Hot Weather Season (Summer) March to May
- Southwest Monsoon Season (Rainy) June to September
- Season of Retreating Monsoon (Autumn) October and November

### Cold Weather Season or Winter

During the winter season, the sun rays do not fall directly in the region. As a result the temperatures are quite low in northern India.

### Hot Weather Season or Summer

In the hot weather season sun rays more or less directly fall in this region. Temperature becomes very high. Hot and dry winds called *loo*, blow during the day.

### South West Monsoon Season or Rainy Season

This season is marked by the onset and advance of monsoon. The winds blow from Arabian Sea and Bay of Bengal towards the land. They carry moisture with them. When these winds strike the mountain barriers, rainfall occurs.

### Season of Retreating Monsoons or Autumn

Winds move back from the mainland to the Bay of Bengal. This is the season of the retreating monsoons. The southern parts of India, particularly Tamil Nadu and Andhra Pradesh receive rainfall in this season. However, the **climate** is about the average weather condition, which have been measured *over many years*. The climate of India has broadly been described as Monsoon type. **Monsoon** is taken from the Arabic word '**mausim**', which means seasons. Due to India's location in the tropical region, most of the rain is brought by monsoon winds. Agriculture in India is dependent on rains. Good monsoons mean adequate rain and a bountiful crop.

The climate of a place is affected by its **location**, **altitude**, **distance from the sea**, and **relief**.

Therefore, we experience regional differences in the climate of India. *Jaisalmer* and *Bikaner* in the desert of Rajasthan are very hot, while *Drass* and *Kargil* in Jammu and Kashmir are *freezing cold*. *Coastal places* like *Mumbai* and *Kolkata* experience *moderate climate*. They are neither too hot nor too cold. Being on the coast, these places are *very humid*. *Mawsynram* in *Meghalaya* receives the *world's highest rainfall*, while in a particular year it might not rain at all in *Jaisalmer* in Rajasthan.

### Natural Vegetation

Due to varied climatic conditions, India has a wide range of natural vegetation. Vegetation of India can be divided into five types – Tropical evergreen forest, Tropical deciduous forest, Thorny bushes, Mountain vegetation and Mangrove forests.

### Tropical Rain Forest

Tropical Rain Forests occur in the areas which receive heavy rainfall. They are so dense that sunlight doesn't reach the ground. Many species of trees are found in these forests, which shed their leaves at different times of the year. Therefore, they always appear green and are called evergreen forest as you may notice in. Important trees found in these forests are *mahogany*, *ebony* and *rosewood*. Andaman and Nicobar Islands, parts of North-Eastern states and a narrow strip of the Western slope of the Western Ghats are home of these

## Chapter 8

## India: Climate, Vegetation And Wildlife

**Weather** is about *day to day changes* in the

forests.

### Tropical Deciduous Forests

In a large part of our country we have this type of forest. These forests are also called monsoon forests. They are less dense. They shed their leaves at a particular time of the year. Important trees of these forests are *sal, teak, peepal, neem and shisham*. They are found in Madhya Pradesh, Uttar Pradesh, Bihar, Jharkhand, Chhattisgarh, Odisha, and in parts of Maharashtra.

### Thorny Bushes

This type of vegetation is found in dry areas of the country. The leaves are in the form of spines to reduce the loss of water. *Cactus, khair, babool, keekar* are important and are found in the states of Rajasthan, Punjab, Haryana, Eastern slopes of Western Ghats and Gujarat.

### Mountain Vegetation

A wide range of species is found in the mountains according to the variation in height.

With increase in height, the temperature falls. At a height between 1500 metres and 2500 metres most of the trees are conical in shape. These trees are called coniferous trees. *Chir, Pine and Deodar* are important trees of these forests.

### Mangrove Forest

These forests can survive in saline water. They are found mainly in *Sunderbans* in West Bengal and in the *Andaman and Nicobar Islands*. *Sundari* is a well-known species of trees in mangrove forests after which *Sunderbans* have been named.

### Why are Forests Necessary?

Forests are very useful for us. They perform various functions. Plants release oxygen that we breathe and absorb *carbon dioxide*. The roots of the plants bind the soil; thus, they control soil erosion.

Leela's parents planted a sapling of "neem" to celebrate her birth. On each birthday, a different sapling was planted. It was watered regularly and protected from severe heat, cold and animals. Children took care not to harm it. When Leela was 20, twenty-one beautiful trees, stood in and around her house. Birds built their nests on them, flowers bloomed, butterflies fluttered around

them, children enjoyed their fruits, swung on their branches and played in their shade.

Forests provide us with timber for furniture, fuel wood, fodder, medicinal plants and herbs, lac, honey, gum, etc. Forests are the natural habitat of wild life.

Natural vegetation has been destroyed to a large extent because of the reckless cutting of trees. We should plant more trees and protect the existing ones and make people aware of the importance of trees. We can have special programmes like *Van Mahotsav* to involve more people in making our earth green.

### Wild Life

Forests are home to a variety of wild life. There are thousands of species of animals and a large variety of reptiles, amphibians, mammals, birds, insects and worms which dwell in the forest.

The tiger is our **national animal**. It is found in various parts of the country. *Gir* forest in Gujarat is the home of Asiatic lions. Elephants and one-horned rhinoceroses roam in the forests of Assam. Elephants are also found in Kerala and Karnataka. Camels and wild asses are found in the Great Indian desert and the Rann of Kutch respectively. Wild goats, snow leopards, bears, etc. are found in the Himalayan region. Besides these, many other animals are found in our country such as monkey, wolf, jackal, nilgai, cheetal, etc.

India is equally rich in bird life. The peacock is our **national bird**. Other common birds are parrots, pigeons, mynah, geese, bulbul and ducks. There are several bird sanctuaries which have been created to give birds their natural habitat. These provide the birds protection from hunters. Can you name five birds that are commonly found in your area? There are several hundreds of species of snakes found in India. Cobras and kraits are important among them.

### Migratory Birds

Some birds such as the Pelican, Siberian Crane, Stork, Flamingo, Pintail Duck and Curlew migrate to our country in the winter season every year. Siberian Cranes migrate from Siberia. They arrive in December and stay till early March.



# NCERT Class 7

## Geography (Our Environment)

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 Environment

The place, people, things and nature that surround any living organism is called **environment**. It is a combination of natural and human made phenomena. While the natural environment refers to both **biotic** and **abiotic** conditions existing on the earth, human environment reveals the activities, creations and interactions among human beings. Environment: French word *Environer/Environner* meaning “neighbourhood”.

##### Natural Environment

Land, water, air, plants and animals comprise the natural environment. You are familiar with the meaning of lithosphere, hydrosphere, atmosphere and biosphere from your previous class. Let us learn some more facts about these domains.

**Lithosphere** is the solid crust or the hard top layer of the earth. It is made up of rocks and minerals and covered by a thin layer of soil. It is an irregular surface with various landforms such as mountains, plateaus, plains, valleys, etc. Landforms are found over the continents and also on the ocean floors.

Lithosphere is the domain that provides us forests, grasslands for grazing, land for agriculture and human settlements. It is also a source of mineral wealth.

The domain of water is referred to as hydrosphere. It comprises various sources of water and different types of water bodies like rivers, lakes, seas, oceans, etc. It is essential for all living organisms.

The atmosphere is the thin layer of air that surrounds the earth. The gravitational force of the earth holds the atmosphere around it. It protects us from the harmful rays and scorching heat of the sun. It consists of a number of gases, dust and water vapour. The changes in the atmosphere produce changes in the weather and climate.

##### Glossary

**Ecosystem**: It is a system formed by the interaction of all living organisms with each other and with the physical and chemical factors of the environment in which they live, all linked by transfer of energy and material. Plant and animal kingdom together make biosphere or the living world. It is a narrow zone of the earth where land, water and air interact with each other to support life.

**Do you know?** On 5 June every year the World Environment Day is celebrated.

All plants, animals and human beings depend on their immediate surroundings. Often they are also interdependent on each other. This relation between the living organisms, as well as the relation between the organisms and their surroundings form an ecosystem. There could be an ecosystem of large rain forest, grassland, desert, mountains, lake, river, ocean and even a small pond.

**Barter System**: It is a trade in which goods are

exchanged without the use of money.

##### Human Environment

Human beings interact with the environment and modify it according to their need. Early humans adapted themselves to the natural surroundings. They led a simple life and fulfilled their requirements from the nature around them. With time needs grew and became more varied. Humans learn new ways to use and change environment. They learn to grow crops, domesticate animals and lead a settled life. The wheel was invented, surplus food was produced, barter system emerged, trade started and commerce developed. Industrial revolution enabled large scale production.

Transportation became faster. Information revolution made communication easier and speedy across the world.

#### Chapter 2 Inside Our Earth

The earth, our homeland is a dynamic planet. It is constantly undergoing changes inside and outside. Have you ever wondered what lies in the interior of the earth? What is the earth made up of?

##### INTERIOR OF THE EARTH

Just like an onion, the earth is made up of several concentric layers with one inside another. The uppermost layer over the earth's surface is called the crust. It is the thinnest of all the layers. It is about 35 km. on the continental masses and only 5 km. on the ocean floors.

The main mineral constituents of the continental mass are silica and alumina. It is thus called sial (si-silica and al-alumina). The oceanic crust mainly consists of silica and magnesium; it is therefore called sima (si-silica and ma-magnesium).

Just beneath the crust is the mantle which extends up to a depth of 2900 km. below the crust. The innermost layer is the core with a radius of about 3500 km. It is mainly made up of nickel and iron and is called nife (ni – nickel and fe – ferrous i.e. iron). The central core has very high temperature and pressure.

*Do You Know?* • The crust forms only 1 per cent of the volume of the earth, 84 per cent consists of the mantle and 15 per cent makes the core. • The radius of the earth is 6371 km.

##### Rocks and Minerals

The earth's crust is made up of various types of rocks. Any natural mass of mineral matter that makes up the earth's crust is called a rock. Rocks can be of different colour, size and texture.

There are three major types of rocks: igneous rocks, sedimentary rocks and metamorphic rocks.

When the molten magma cools, it becomes solid. Rocks thus formed are called igneous rocks. They are also called primary rocks. There are two types of igneous rocks: **intrusive rocks** and **extrusive rocks**.

**Word Origin Igneous:** Latin word Ignis meaning fire.

**Sedimentary:** Latin word sedimentum meaning settle down

**Metamorphic:** Greek word *metamorphose* meaning change of form.

Can you imagine lava coming out from the volcanoes? Lava is actually fiery red molten magma coming out from the interior of the earth on its surface. When this molten lava comes on the earth's surface, it rapidly cools down and becomes solid. Rocks formed in such a way on the crust are called extrusive igneous rocks. They have a very fine grained structure. For example, basalt. The Deccan plateau is made up of basalt rocks.

Sometimes the molten magma cools down deep inside the earth's crust. Solid rocks so formed are called intrusive igneous rocks. Since they cool down slowly they form large grains. Granite is an example of such a rock. Grinding stones used to prepare paste/powder of spices and grains are made of granite.

Rocks roll down, crack, and hit each other and are broken down into small fragments. These smaller particles are called sediments. These sediments are transported and deposited by wind, water, etc. These loose sediments are compressed and hardened to form layers of rocks. These types of rocks are called sedimentary rocks. For example, sandstone is made from grains of sand. These rocks may also contain fossils of plants, animals and other micro-organisms that once lived on them.

Igneous and sedimentary rocks can change into metamorphic rocks under great heat and pressure. Further, one type of rock changes to another type under certain conditions in a cyclic manner. This process of transformation of the rock from one to another is known as the **rock cycle**.

You have already learnt when the molten magma cools; it solidifies to become igneous rock. These igneous rocks are broken down into small particles that are transported and deposited to form sedimentary rocks. When the igneous and sedimentary rocks are subjected to heat and pressure they change into metamorphic rocks. The metamorphic rocks which are still under great heat and pressure melt down to form molten magma. This molten magma again can cool down and solidify into igneous rocks.

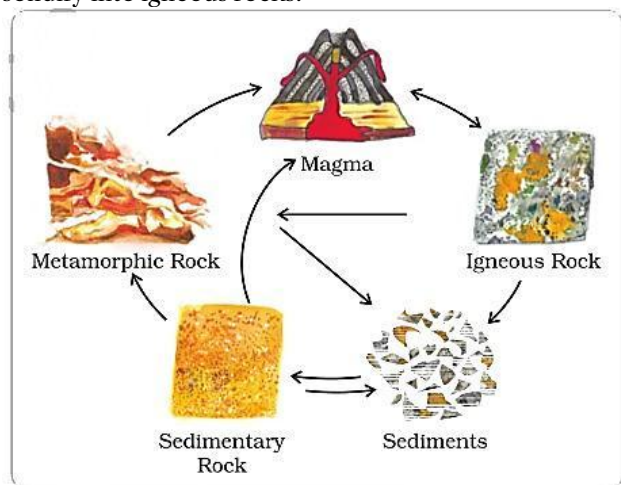


Fig. 2.4: Rock Cycle

Rocks are made up of different minerals. Minerals are naturally occurring substances which have certain physical properties and definite chemical composition. Minerals are very important to humankind. Some are used as fuels. For example, coal, natural gas and petroleum. They are also used in industries – iron,

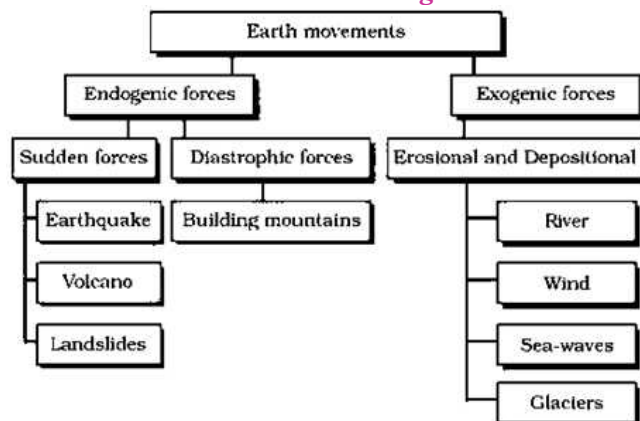
aluminium, gold, uranium, etc, in medicine, in fertilisers, etc.

**Important Terms** **Fossils:** The remains of the dead plants and animals trapped in the layers of rocks **Crust:** A hard outer covering of earth **Mantle:** The part of the earth that surrounds the central core **Core:** The inner part of the earth **Rock:** The dry solid part of the earth's surface **Mineral:** A naturally occurring solid substance that is not of plant or animal origin **Rock Cycle:** The process of transformation of rocks from one form to another is called rock cycle.

## Chapter 3 Our Changing Earth

**Lithospheric plates:** The earth's crust consists of several large and some small, rigid, irregularly-shaped plates (slabs) which carry continents and the ocean floor. The lithosphere is broken into a number of plates known as the **Lithospheric plates**. You will be surprised to know that these plates move around very slowly – just a few millimetres each year. This is because of the movement of the molten magma inside the earth. The molten magma inside the earth moves in a circular manner as shown in the activity.

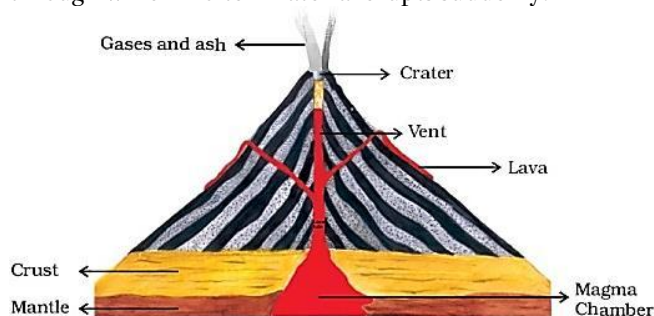
The movement of these plates causes changes on the surface of the earth. The earth movements are divided on the basis of the forces which cause them. The forces which act in the interior of the earth are called as **Endogenic forces** and the forces that work on the surface of the earth are called as **Exogenic forces**.



### Evolution of Landforms

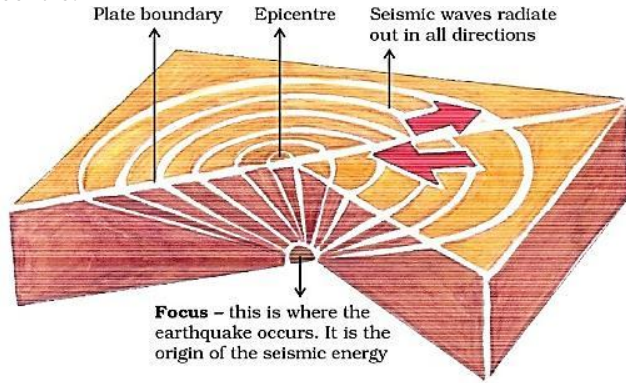
Endogenic forces sometimes produce sudden movements and at the other times produce slow movements. Sudden movements like **earthquakes** and **volcanoes** cause mass destruction over the surface of the earth.

A **volcano** is a vent (opening) in the earth's crust through which molten material erupts suddenly.



Similarly, when the Lithospheric plates move, the surface of the earth vibrates. The vibrations can travel all round the earth. These vibrations are called **earthquakes**. The place in the crust where the movement starts is called the **focus**. The place on the surface above the focus is called the **epicentre**.

Vibrations travel outwards from the epicentre as waves. Greatest damage is usually closest to the epicentre and the strength of the earthquake decreases away from the centre.



### Origin of an Earthquake

**Do you know?** There are three types of earthquake waves:

1. P waves or longitudinal waves
2. S waves or transverse waves
3. waves or surface waves

Try to find out the properties of these waves from an encyclopedia.

Although earthquakes cannot be predicted, the impact can certainly be minimised if we are prepared beforehand.

Some common earthquake prediction methods adopted locally by people include studying animal behaviour; fish in the ponds get agitated, snakes come to the surface.

**Do you know?** An earthquake is measured with a machine called a seismograph. The magnitude of the earthquake is measured on the Richter scale. An earthquake of 2.0 or less can be felt only a little. An earthquake over 5.0 can cause damage from things falling. A 6.0 or higher magnitude is considered very strong and 7.0 is classified as a major earthquake.

### EARTHQUAKE PREPAREDNESS

Where to take shelter during an earthquake —

**Safe Spot** — Under a kitchen counter, table or desk, against an inside corner or wall.

**Stay Away from** — Fire places, areas around chimneys, windows that shatter including mirrors and picture frames.

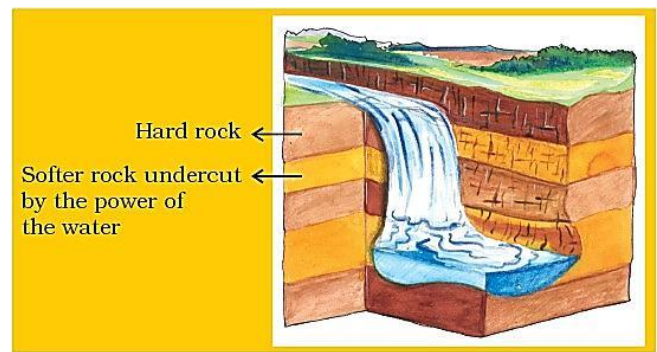
**Be Prepared** — Spread awareness amongst your friends and family members and face any disaster confidently.

### Major Land Forms

The landscape is being continuously worn away by two processes — weathering and erosion. **Weathering** is the breaking up of the rocks on the earth's surface. **Erosion** is the wearing away of the landscape by different agents like water, wind and ice. The eroded material is carried away or transported by water, wind, etc. and eventually deposited. This process of erosion and deposition create different landforms on the surface of the earth.

### Work of a River

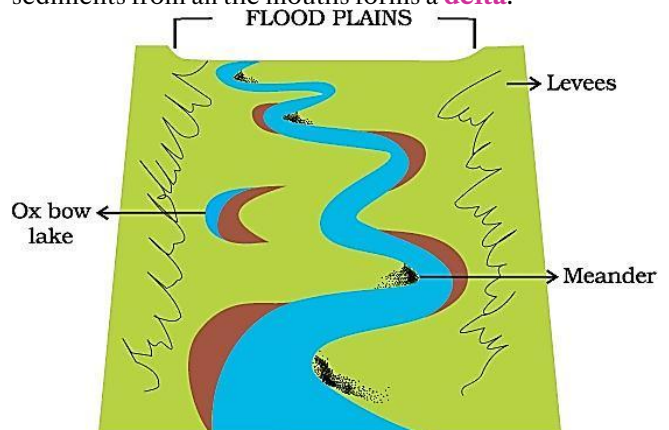
The running water in the river erodes the landscape. When the river tumbles at steep angle over very hard rocks or down a steep valley side it forms a **waterfall**.



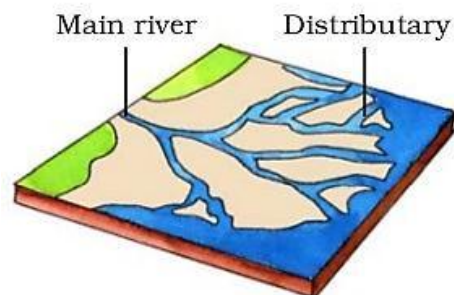
### Waterfall

**Do you know?** There are thousands of small waterfalls in the world. The highest waterfall is Angel Falls of Venezuela in South America. The other waterfalls are Niagara falls located on the border between Canada and USA in North America and Victoria Falls on the borders of Zambia and Zimbabwe in Africa.

As the river enters the plain it twists and turns forming large bends known as **meanders**. Due to continuous erosion and deposition along the sides of the meander, the ends of the meander loop come closer and closer. In due course of time the meander loop cuts off from the river and forms a cut-off lake, also called an **ox-bow lake**. At times the river overflows its banks. This leads to the flooding of the neighbouring areas. As it floods, it deposits layers of fine soil and other material called sediments along its banks. This leads to the formation of a flat fertile **floodplain**. The raised banks are called **levees**. As the river approaches the sea, the speed of the flowing water decreases and the river begins to break up into a number of streams called distributaries. The river becomes so slow that it begins to deposit its load. Each distributary forms its own mouth. The collection of sediments from all the mouths forms a **delta**.



Features made by a river in a flood plain



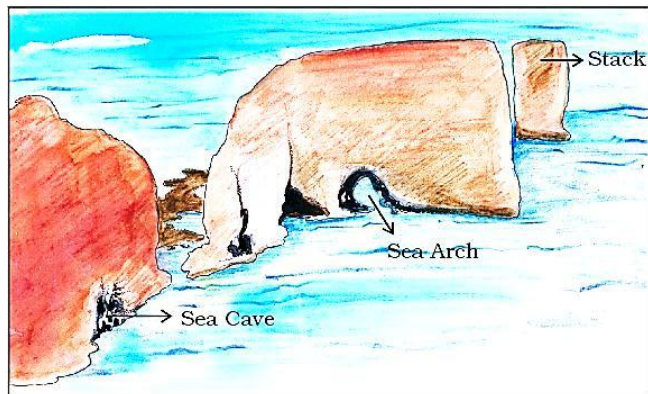
### A Delta

#### Work of Sea Waves

The erosion and deposition of the sea waves gives rise to coastal landforms. Seawaves continuously strike at the rocks. Cracks develop. Over time they become larger and wider. Thus, hollow like caves are formed on the rocks. They are called **sea caves**. As these cavities become bigger and bigger only the roof of the caves



remain, thus forming **sea arches**. Further, erosion breaks the roof and only walls are left. These wall like features are called **stacks**. The steep rocky coast rising almost vertically above sea water is called **sea cliff**. The sea waves deposit sediments along the shores forming beaches.



*Features made by sea waves*

### Work of Ice

Glaciers are “rivers” of ice which too erode the landscape by bulldozing soil and stones to expose the solid rock below. Glaciers carve out deep hollows. As the ice melts they get filled up with water and become beautiful lakes in the mountains. The material carried by the glacier such as rocks big and small, sand and silt gets deposited. These deposits form **glacial moraines**.

### Work of wind

Have you ever visited a desert? Try to collect some pictures of sand dunes.

An active agent of erosion and deposition in the deserts is wind. In deserts you can see rocks in the shape of a mushroom, commonly called **mushroom rocks**. Winds erode the lower section of the rock more than the upper part. Therefore, such rocks have narrower base and wider top. When the wind blows, it lifts and transports sand from one place to another. When it stops blowing the sand falls and gets deposited in low hill – like structures. These are called **sand dunes**. When the grains of sand are very fine and light, the wind can carry it over very long distances. When such sand is deposited in large areas, it is called **loess**. Large deposits of loess is found in China.

**Important Terms** **Earthquake:** A sudden violent shaking of the ground as a result of movements within the earth's crust **Volcano:** An opening (vent) in the earth's crust through which molten material erupts suddenly **Focus:** The point of origin of an earthquake **Epicentre:** The place on the surface above the focus **Weathering:** The breaking up of the rocks on the earth's surface **Erosion:** The wearing away of the landscape by different agents like water, wind and ice **Sea caves, Sea arches, Stacks and Sea Cliff:** Over the time sea-rock cracks become larger and wider. Thus, hollow caves are formed on the rocks. They are called *Sea caves*. As those sea caves become bigger and bigger and only the roofs of the caves remain, thus *Sea arches* form. Further, erosion breaks the roof and only walls are left. These walls Like features are called *stacks*. The steep rocky coast rising almost vertically above the sea water is called *Sea cliff*.

and get frozen during night. So it is this mass of air that has made the temperature on the earth liveable.

**Do you know?** Carbon dioxide released in the atmosphere creates a green house effect by trapping the heat radiated from the earth. It is therefore called a greenhouse gas and without it the earth would have been too cold to live in. However, when its level in the atmosphere increases due to factory smoke or car fumes, the heat retained increases the temperature of the earth. This is called global warming. This rise in temperature causes the snow in coldest parts of the world to melt. As a result the sea level rises, causing floods in the coastal areas. There may be drastic changes in the climate of a place leading to extinction of some plants and animals in the long run.

### Composition of the Atmosphere

**Do you know?** that the air we take in while breathing is actually a mixture of many gases? Nitrogen and oxygen are two gases which make up the bulk of the atmosphere. Carbon dioxide, helium, ozone, argon and hydrogen are found in lesser quantities. Apart from these gases, tiny dust particles are also present in the air. Nitrogen is the most plentiful gas in the air. When we inhale, we take some amount of nitrogen into our lungs and exhale it. But plants need nitrogen for their survival. They can not take nitrogen directly from the air. Bacteria, that live in the soil and roots of some plants, take nitrogen from the air and change its form so that plants can use it.

Oxygen is the second most plentiful gas in the air. Humans and animals take oxygen from the air as they breathe. Green plants produce oxygen during photosynthesis. In this way oxygen content in the air remains constant. If we cut trees then this balance gets disturbed.

Carbon dioxide is another important gas. Green plants use carbon dioxide to make their food and release oxygen. Humans or animals release carbon dioxide. The amount of carbon dioxide released by humans or animals seems to be equal to the amount used by the plants which make a perfect balance. However, the balance is upset by burning of fuels, such as coal and oil. They add billions of tons of carbon dioxide into the atmosphere each year. As a result, the increased volume of carbon dioxide is affecting the earth's weather and climate.

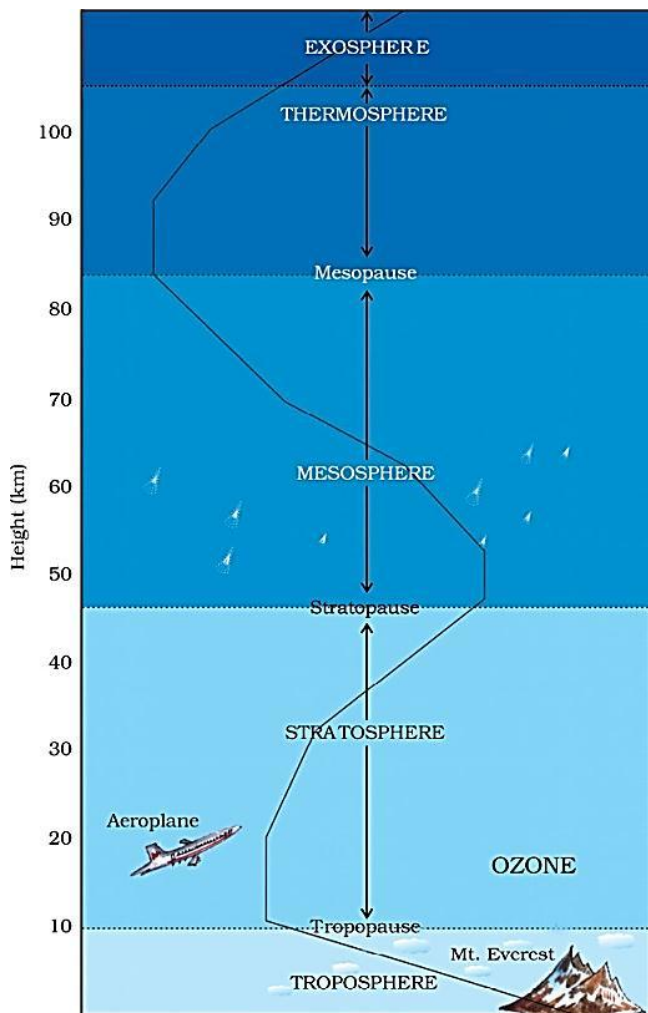
**Do you know?** When air is heated, it expands, becomes lighter and goes up. Cold air is denser and heavy. That is why it tends to sink down. When hot air rises, cold air from surrounding area rushes there to fill in the gap. That is how air circulation takes place.

### Structure of the Atmosphere

Our atmosphere is divided into five layers starting from the earth's surface. These are Troposphere, Stratosphere, Mesosphere, Thermosphere and Exosphere.

## Chapter 4 Air

Our earth is surrounded by a huge blanket of air called atmosphere. All living beings on this earth depend on the atmosphere for their survival. It provides us the air we breathe and protects us from the harmful effects of the sun's rays. Without this blanket of protection, we would be baked alive by the heat of the sun during day



### Layers of the Atmosphere

**Troposphere:** This layer is the most important layer of the atmosphere. Its average height is 13 km. The air we breathe exists here. Almost all the weather phenomena like rainfall, fog and hailstorm occur in this layer.

**Stratosphere:** Above the troposphere lies the stratosphere. It extends up to a height of 50 km. This layer is almost free from clouds and associated weather phenomenon, making conditions most ideal for flying aeroplanes. One important feature of stratosphere is that it contains a layer of ozone gas. We have just learnt how it protects us from the harmful effect of the sun rays.

**Mesosphere:** This is the third layer of the atmosphere. It lies above the stratosphere. It extends up to the height of 80 km. Meteorites burn up in this layer on entering into the space.

**Thermosphere:** In thermosphere temperature rises very rapidly with increasing height. Ionosphere is a part of this layer. It extends between 80-400 km. This layer helps in radio transmission. In fact, radio waves transmitted from the earth are reflected back to the earth by this layer.

**Exosphere:** The upper most layer of the atmosphere is known as exosphere. This layer has very thin air. Light gases like helium and hydrogen float into the space from here.

### Weather and Climate

"Is it going to rain today?" "Will it be bright and sunny today?" How many times have we heard this from anxious cricket fans speculating the fate of a One Day match? If we imagine our body to be a radio and the mind its speaker, weather is something that fiddles with its control knobs. Weather is this hour-to-hour, day to

day condition of the atmosphere. A hot or humid weather may make one irritable. A pleasant, breezy weather may make one cheerful and even plan for an outing. Weather can change dramatically from day to day. However, the average weather condition of a place for a longer period of time represents the climate of a place. Now do you understand why we have daily weather forecasts.

### Temperature

The temperature you feel everyday is the temperature of the atmosphere. The degree of hotness and coldness of the air is known as temperature. The temperature of the atmosphere changes not only between day and night but also from season to season. Summers are hotter than winters.

An important factor that influences the distribution of temperature is **insolation**. **Insolation** is the incoming solar energy intercepted by the earth. The amount of insolation decreases from the equator towards the poles. Therefore, the temperature decreases in the same manner. Now do you understand why poles are covered with snow? If the earth's temperature rises too high, it would become too warm for some crops to grow. Temperature in cities is much higher than that of villages. The concrete and metals in buildings and the asphalt of roads get heated up during the day. This heat is released during the night. Also, the crowded high rise buildings of the cities trap the warm air and thus raise the temperature of the cities.

**Do you know?** The standard unit of measuring temperature is degree Celsius. It was invented by Anders Celsius. On the Celsius scale the water freezes at 0°C and boils at 100°C.

### Air Pressure

Air above us presses us with a great force on our bodies. However, we don't even feel it. This is because the air presses us from all directions and our body exerts a counter pressure. Astronauts have to wear special protective space suits filled with air when they go to the moon. If they did not wear these space suits, the counter pressure exerted by the body of the astronauts would make the blood vessels burst. The astronauts would bleed.

Air pressure is defined as the pressure exerted by the weight of air on the earth's surface. As we go up the layers of atmosphere, the pressure falls rapidly. The air pressure is highest at sea level and decreases with height. Horizontally the distribution of air pressure is influenced by temperature of air at a given place. In areas where temperature is high the air gets heated and rises. This creates a low-pressure area. Low pressure is associated with cloudy skies and wet weather.

In areas having lower temperature, the air is cold. It is therefore heavy. Heavy air sinks and creates a high pressure area. High pressure is associated with clear and sunny skies.

The air always moves from high pressure areas to low pressure areas.

### Wind

The movement of air from high pressure area to low pressure areas is called wind. You can see wind at work as it blows dry leaves down the pavement or uproots trees during a storm. Sometimes when the wind blows gently you can even see it blowing away smoke or fine dust. At times wind can be so strong that it is difficult to walk against it. You must have experienced it is not easy to hold an umbrella on a windy day. Think of some other examples when strong winds have created

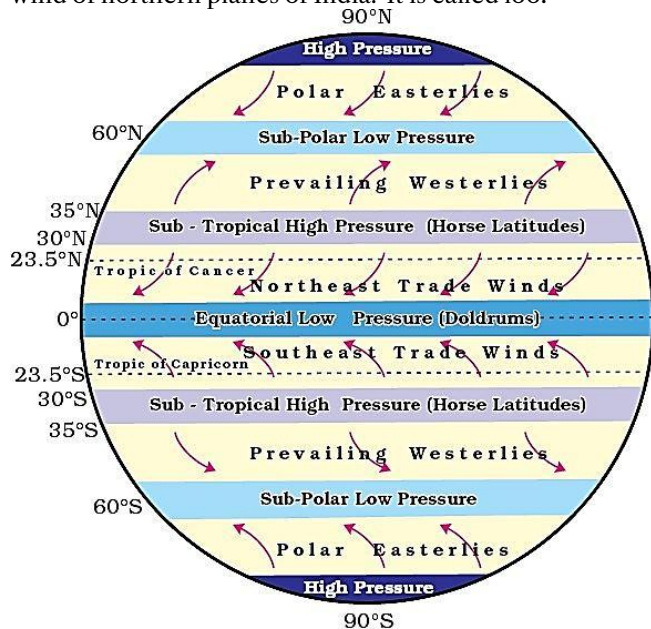
**Do you know?** A wind is named after the direction **from** which it blows, e.g. the wind blowing **from** the west is called



westerly.

problems for you. Winds can be broadly divided into threetypes.

1. **Permanent winds** – The trade winds, westerlies and easterlies are the permanent winds. These blow constantly throughout the year in a particular direction.
2. **Seasonal winds** – These winds change their direction in different seasons. For example monsoons in India.
3. **Local winds** – These blow only during a particular period of the day or year in a small area. For example, land and sea breeze. Do you recall the hot and dry local wind of northern plains of India? It is called loo.



Major Pressure Belts and Wind System

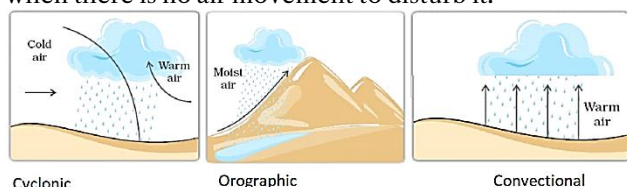
### **CYCLONE – NATURE'S FURY**

Odisha, located on the eastern seacoast of India is prone to cyclones that originate in the Bay of Bengal. The cyclone originated as a "depression". The damages caused by cyclones were mainly due to three factors: wind velocity, rain and tidal surge. Heavy rain occurred under the influence of the cyclone. These rains led to flooding in the major rivers of Odisha. The cyclonic winds caused tidal waves that swept 20 km. inland and brought massive destruction to the coastal areas.

### **Moisture**

When water evaporates from land and different water bodies, it becomes water vapour. Moisture in the air at any time, is known as humidity. When the air is full of water vapour we call it a humid day. As the air gets warmer, its capacity to hold the water vapour increases and so it becomes more and more humid. On a humid day, clothes take longer to dry and sweat from our body does not evaporate easily, making us feel very uncomfortable.

When the water vapour rises, it starts cooling. The water vapour condenses causing formation of droplets of water. Clouds are just masses of such water droplets. When these droplets of water become too heavy to float in air, then they come down as precipitation. Jet planes flying in the sky leave a white trail behind them. The moisture from their engines condenses. We see trails of this condensed moisture for some time when there is no air movement to disturb it.



Cyclonic

Orographic

Convectional

Precipitation that comes down to the earth in liquid form is called rain. Most of the ground water comes from rainwater. Plants help preserve water. When trees on hill sides are cut, rainwater flows down the bare mountains and can cause flooding of low lying areas. On the basis of mechanism, there are three types of rainfall: the convectional rainfall, the orographic rainfall and the cyclonic rainfall.

**Do you know?** Other forms of precipitation are snow, sleet, hail.

**Important Terms Atmosphere:** A huge blanket of air surrounding the earth. **Troposphere:** The lowest atmospheric layer in which all of earth's weather occurs. **Weather:** The condition of the atmosphere in one area at a particular time, for example if it is raining, hot, or windy. **Climate:** The average weather condition of a place for a long period of time.

**Insolation:** The amount of energy from the sun that reaches the earth. **Wind:** The movement of air from high pressure area to low pressure areas. **Cyclone:** A violent tropical storm or wind

## Chapter 5 Water

We all know that three-fourth of the earth surface is covered by water. The sun's heat causes evaporation of water vapour. When the water vapour cools down, it condenses and forms clouds. From there it may fall on the land or sea in the form of rain, snow or sleet. The process by which water continually changes its form and circulates between oceans, atmosphere and land is known as the water cycle.

The major sources of fresh water are the rivers, ponds, springs and glaciers. The ocean bodies and the seas contain salty water. The water of the oceans is salty or saline as it contains large amount of dissolved salts. Most of the salt is sodium chloride or the common table salt that you eat.

### **Distribution of Water Bodies**

Bodies	Percentage	Nature
Oceans	97.3	Saline
Ice-caps:	02.0	Fresh
Ground Water	0.68	
Fresh Water lakes	0.009	
Inland seas and salt lakes	0.009	
Atmosphere	0.0019	
Rivers	0.00001	

**Do you know?** Salinity is the amount of salt in grams present in 1000 grams of water. The average salinity of the oceans is 35 parts per thousand. Dead sea in Israel has salinity of 340 grams per litre of water. Swimmers can float in it because the increased salt content makes it dense.

### **Ocean Circulation**

There is something magical about walking bare feet on the seashore. The wet sand on the beach, the cool breeze, the seabirds, the smell of the salt in the air and music of the waves; everything is so fascinating. Unlike the calm waters of ponds and lakes, ocean water keeps moving continuously. It is never still. The movements that occur in oceans can be broadly categorised as: waves, tides and currents.

**Do you know?** March 22 is celebrated as World Water Day when the need to conserve water is reinforced in different ways.

### **Waves**

When you are playing throw ball on the beach and the ball falls into the water, what happens? It is fun to watch how the ball gets washed back to the shore by the



waves. When the water on the surface of the ocean rises and falls alternately, they are called waves.

**Do you know?** Waves are formed when winds scrape across the ocean surface. The stronger the wind blows, the bigger the wave becomes.

During a storm, the winds blowing at very high speed form huge waves. These may cause tremendous destruction. An earthquake, a volcanic eruption or underwater landslides can shift large amounts of ocean water. As a result a huge tidal wave called **tsunami**, that may be as high as 15m., is formed. The largest tsunami ever measured was 150m. high. These waves travel at a speed of more than 700 km. per hour. The tsunami of 2004 caused wide spread damage in the coastal areas of India. The Indira point in the Andaman and Nicobar islands got submerged after the tsunami.

**Do you know?** Tsunami is a Japanese word that means "Harbour waves" as the harbours get destroyed whenever there is tsunami.

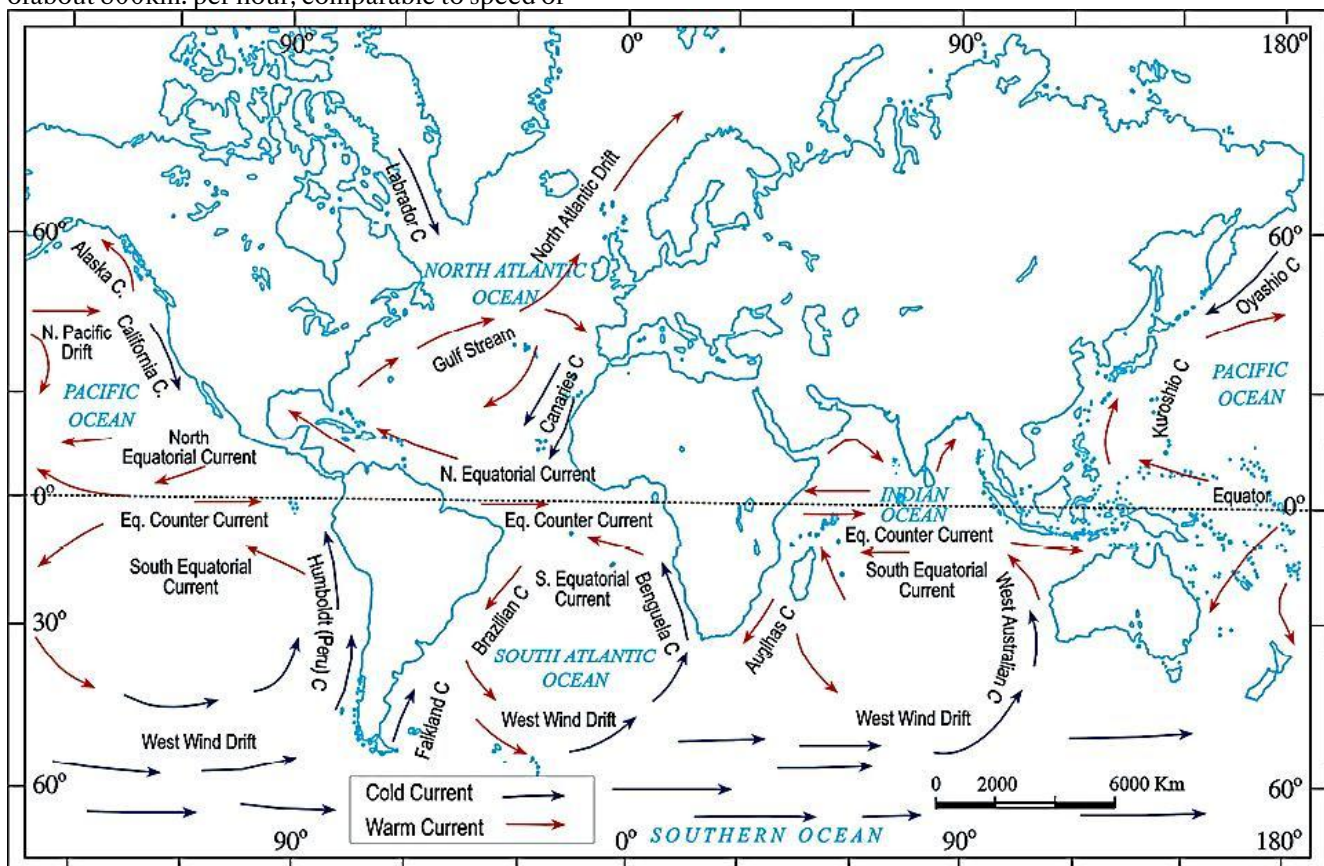
### TSUNAMI – THE EARTH'S PANDEMONIUM

Tsunami or the harbour wave struck havoc in the Indian Ocean on the 26 December 2004. The wave was the result of the earthquake that had its epicenter close to the western boundary of Sumatra. The magnitude of the earthquake was 9.0 on the Richter scale. As the Indian plate went under the Burma plate, there was a sudden movement of the sea floor, causing the earthquake. The ocean floor was displaced by about 10 – 20m and tilted in a downwardly direction. A huge mass of ocean water flowed to fill in the gap that was being created by the displacement. This marked the withdrawal of the water mass from the coastlines of the landmasses in the south and southeast Asia. After thrusting of the Indian plate below the Burma plate, the water mass rushed back towards the coastline. Tsunami travelled at a speed of about 800km. per hour, comparable to speed of

commercial aircraft and completely washed away some of the islands in the Indian ocean. The Indira point in the Andaman and Nicobar islands that marked the southernmost point of India got completely submerged. As the wave moved from earthquake epicenter from Sumatra towards the Andaman islands and Sri Lanka the wave length decreased with decreasing depth of water. The travel speed also declined from 700-900km. per hour to less than 70km. per hour. Tsunami waves travelled upto a depth of 3 km. from the coast killing more than 10,000 people and affected more than lakh of houses. In India, the worst affected were the coastal areas of Andhra Pradesh, Tamil Nadu, Kerala, Puducherry and the Andaman and Nicobar Islands. While the earthquake cannot be predicted in advance, it is possible to give a three-hour notice of a potential tsunami. Such early warning systems are in place across the Pacific ocean, but not in the Indian Ocean. Tsunamis are rare in the Indian Ocean as the seismic activity is less as compared to the Pacific.

The tsunami that ravaged the South and South east Asian coasts in December 2004, is the most devastating tsunami in the last several hundred years. The large damage caused to life and property was primarily a result of lack of monitoring, the early warning systems and knowledge among the coast dwellers of Indian ocean.

The first indication that tsunami is approaching is the rapid withdrawal of water from the coastal region, followed by destructive wave. When this happened on the coast, instead of people going to high ground, they started assembling at the coast to view the miracle. As a consequence there was a large casualty of curious onlookers when the gigantic wave (tsunami) struck.



Ocean Currents

### Tides

The rhythmic rise and fall of ocean water twice in a day is called a tide. It is high tide when water covers much of

the shore by rising to its highest level. It is low tide when water falls to its lowest level and recedes from the shore. The strong gravitational pull exerted by the sun and the

moon on the earth's surface causes the tides. The water of the earth closer to the moon gets pulled under the influence of the moon's gravitational force and causes high tide. During the full moon and new moon days, the sun, the moon and the earth are in the same line and the tides are highest. These tides are called spring tides. But when the moon is in its first and last quarter, the ocean waters get drawn in diagonally opposite directions by the gravitational pull of sun and earth resulting in low tides. These tides are called neap tides.

High tides help in navigation. They raise the water level close to the shores. This helps the ships to arrive at the harbour more easily. The high tides also help in fishing. Many more fish come closer to the shore during the high tide. This enables fishermen to get a plentiful catch. The rise and fall of water due to tides is being used to generate electricity in some places.

### Ocean Currents

Ocean currents are streams of water flowing constantly on the ocean surface in definite directions. The ocean currents may be warm or cold. Generally, the warm ocean currents originate near the equator and move towards the poles. The cold currents carry water from polar or higher latitudes to tropical or lower latitudes. The Labrador Ocean current is cold current while the Gulf Stream is a warm current. The ocean current influence the temperature conditions of the area. Warm currents bring about warm temperature over land surface. The areas where the warm and cold currents meet provide the best fishing grounds of the world. Seas around Japan and the eastern coast of North America are such examples. The areas where a warm and cold current meet also experience foggy weather making it difficult for navigation.

**Important Terms** **Terrarium:** An artificial enclosure for keeping small house plants. **Saline:** Containing salt. **Ocean:** A very large area of sea. **Tsunami:** A long, high sea wave caused by an earthquake. **Tide:** The rhythmic rise and fall of ocean water twice in a day. **Ocean currents:** Streams of water flowing constantly on the ocean surface in definite directions.

## Chapter 6 Natural Vegetation And Wild Life

**Natural vegetation** means the plants that grow naturally without human interference. Natural vegetation is generally classified in to three broad categories as follows:

- Forests:** Which grow where temperature and rainfall are plentiful to support a tree cover. Depending upon these factors, dense and open forests are grown.
- Grasslands:** Which grow in the region of moderate rain.
- Shrubs:** Thorny shrubs and scrubs grow in the dry region.

The changes in the type of natural vegetation occur mainly because of the changes of climatic condition. Let us get to know the different types of natural vegetation of the world with their characteristic features and wildlife inhabiting there.

**Do you know?** The tropical evergreen forest in Brazil is so enormous that it is like the lungs of the earth: Can you tell why?

### Forests

#### Tropical Evergreen Forests

These forests are also called tropical rainforests. These thick forests occur in the regions near the equator and close to the tropics. These regions are hot and receive heavy rainfall throughout the year. As there is no

particular dry season, the trees do not shed their leaves altogether. This is the reason they are called evergreen. The thick canopies of the closely spaced trees do not allow the sunlight to penetrate inside the forest even in the day time. Hardwood trees like rosewood, ebony, mahogany are common here.

**Do you know?** Anaconda, one of the world's largest snakes is found in the tropical rainforest. It can kill and eat a large animal such as a crocodile.

#### Tropical Deciduous Forests

Tropical deciduous are the monsoon forests found in the large part of India, northern Australia and in central America. These regions experience seasonal changes. Trees shed their leaves in the dry season to conserve water.

The hardwood trees found in these forests are sal, teak, neem and shisham. Hardwood trees are extremely useful for making furniture, transport and constructional materials. Tigers, lions, elephants, langoors and monkeys are the common animals of these regions.

#### Temperate Evergreen Forests

The temperate evergreen forests are located in the mid-latitudinal coastal region. They are commonly found along the eastern margin of the continents, e.g., In south east USA, South China and in South East Brazil. They comprise both hard and soft wood trees like oak, pine, eucalyptus, etc.

#### Temperate Deciduous Forests

As we go towards higher latitudes, there are more temperate deciduous forests. These are found in the north eastern part of USA, China, New Zealand, Chile and also found in the coastal regions of Western Europe. They shed their leaves in the dry season. The common trees are oak, ash, beech, etc. Deer, foxes, wolves are the animals commonly found. Birds like pheasants, monals are also found here.

**Do you know?** Mediterranean trees adapt themselves to dry summers with the help of their thick barks and wax coated leaves which help them reduce transpiration. Mediterranean regions are known as 'Orchards of the world' for their fruit cultivation.

#### Mediterranean Vegetation

You have learnt that most of the east and north east margins of the continents are covered by temperate evergreen and deciduous trees. The west and south west margins of the continents are different. They have Mediterranean vegetation. It is mostly found in the areas around the Mediterranean sea in Europe, Africa and Asia, hence the name. This kind of vegetation is also found outside the actual Mediterranean region in California in the USA, south west Africa, south western South America and South west Australia. These regions are marked for hot dry summers and mild rainy winters. Citrus fruits such as oranges, figs, olives and grapes are commonly cultivated here because people have removed the natural vegetation in order to cultivate what they want to. There isn't much wildlife here.

#### Coniferous Forests

In the higher latitudes (50° – 70°) of Northern hemisphere the spectacular Coniferous forests are found. These are also called as Taiga. These forests are also seen in the higher altitudes. These are the trees which Salima found in the Himalayas in abundance. They are tall, softwood evergreen trees. The woods of these trees are very useful for making pulp, which is used for manufacturing paper and newsprint. Match boxes and packing boxes are also made from softwood. Chir, pine, cedar are the important variety of trees in these forests. Silver fox, mink, polar bear are the common animals found here.



**Do you know?** Taiga means pure or untouched in the Russian language

### Grasslands

**Tropical grasslands:** These occur on either side of the equator and extend till the tropics.

This vegetation grows in the areas of moderate to low amount of rainfall. The grass can grow very tall, about 3 to 4 metres in height. Savannah grasslands of Africa are of this type. Elephants, zebras, giraffes, deer, leopards are common in tropical grasslands.

**Do you know?** Grasslands are known by different names in different regions.

#### Tropical Grasslands

East Africa-Savanna

Brazil-Campos

Venezuela-Llanos

#### Temperate Grasslands

Argentina- Pampas

N. America- Prairie

S. Africa- Veld

C. Asia- Steppe

Australia- Down

**Temperate grasslands:** These are found in the mid-latitudinal zones and in the interior part of the continents. Usually, grass here is short and nutritious. Wild buffaloes, bison, antelopes are common in the temperate region.

**Thorny bushes:** These are found in the dry desert like regions. Tropical deserts are located on the western margins of the continents. The vegetation cover is scarce here because of scanty rain and scorching heat. Identify the desert regions in the world map. Can you name the great desert of India? Name some of the common animals of the desert which you have learnt earlier.

If you reach the polar region you will find the place extremely cold. The growth of natural vegetation is very limited here. Only mosses, lichens and very small shrubs are found here. It grows during the very short summer. This is called Tundra type of vegetation. This vegetation is found in the polar areas of Europe, Asia and North America. The animals have thick fur and thick skin to protect themselves from the cold climatic conditions. seal, walrus, musk-oxen, Arctic owl, Polar bear and snow foxes are some of the animals found here.

**Important Terms Vegetation:** Plants in general, or plants that are found in a particular area. **Wildlife:** Wild animals collectively. **Tropical:** From or relating to the area between the two tropics; very hot and humid. **Deciduous:** (of a tree or shrub) shedding its leaves annually. **Temperate:** (of weather conditions) neither very hot nor very cold. **Mediterranean:** The region surrounding the Mediterranean Sea. **Coniferous:** (of trees or shrubs) bearing cones or evergreen leaves. **Tundra:** A vast, flat, treeless Arctic region of Europe, Asia, and North America.

## Chapter 7

### Human Environment-Settlement, Transport And Communication

We know that early human beings depended entirely on nature for food, clothing and shelter; but with time they learnt new skills to grow food, build homes and develop better means of transport and communication. In this way they modified the environment where they lived.

**Settlements** are places where people build their homes. Early human beings lived on trees and in caves. When they started to grow crops it became necessary to have a permanent home. The settlements grew near the

river valleys as water was available and land was fertile. With the development of trade, commerce and manufacturing, human settlements became larger. Settlement flourished and civilizations developed near river valleys. Do you recall the names of civilization that grew along the banks of rivers Indus, Tigris, Nile and Hwang-He.

**Do you know?** The place where a building or a settlement develops is called its **site**. The natural conditions for selection of an ideal site are- 1. favourable climate 2. availability of water 3. suitable land 4. fertile soil

Settlements can be **permanent** or **temporary**.

Settlements which are occupied for a short time are called **temporary settlements**. The people living in deep forests, hot and cold deserts and mountains often dwell in such temporary settlements. They practice hunting, gathering, shifting cultivation and transhumance. However more and more settlements today are **permanent settlements**. In these settlements, people build homes to live in.

**Transhumance:** It is a seasonal movement of people.

People who rear animals move in search of new pastures according to changes in seasons.

From the above conversation we can identify two different pictures of settlements – the rural and the urban settlements. The villages are rural settlement where people are engaged in activities like agriculture, fishing, forestry, crafts work and trading etc. Rural settlements can be compact or scattered. A compact settlement is a closely built area of dwellings, wherever flat land is available.

In a scattered settlement dwellings are spaced over an extensive area. This type of settlement is mostly found in hilly tracts, thick forests, and regions of extreme climate.

In rural areas, people build houses to suit their environment. In regions of heavy rainfall, they have slanting roofs. Places where water accumulates in the rainy season the houses are constructed on a raised platform or stilts.

Thick mud walled houses with thatched roofs are very common in areas of hot climate. Local materials like stones, mud, clay, straw etc are used to construct houses.

The towns are small and the cities are larger urban settlements. In urban areas the people are engaged in manufacturing, trading, and services. Name some of the villages, towns and cities of your state.

### Transport

Transport is the means by which people and goods move. In the early days it took a great deal of time, to travel long distances. People had to walk and used animals to carry their goods. Invention of the wheel made transport easier. With the passage of time different means of transport developed but even today people use animals for transport.

In our country donkeys, mules, bullocks and camels are common. In the Andes Mountains of South America, llamas are used, as are yaks in Tibet. The early traders from other countries used to take several months to reach India. They took either the sea route or the land route. Aeroplanes have made travel faster. Now it takes only 6-8 hours to travel from India to Europe. Modern means of transport thus saves time and energy.

**Do you know?** There are several National and State highways in India. The latest development in India is the construction of Express Ways. The Golden Quadrilateral connects Delhi, Mumbai, Chennai and Kolkata.

### Roadways

The most commonly used means of transport especially



for short distances are roads. They can be **metalled** (*pucca*) and **unmetalled** (*kutchha*). The plains have a dense network of roads. Roads have also been built in terrains like deserts, forests and even high mountains. Manali-Leh highway in the Himalayan Mountains is one of the highest roadways in the world. Roads built underground are called **subways/under paths**. Flyovers are built over raised structures.

**Do you know?** The train from Xining to Lhasa runs at an altitude of 4,000m above sea level and the highest point is 5,072 m

### Railways

The railways carry heavy goods and people over long distances quickly and cheaply. The invention of the steam engine and the Industrial Revolution helped in speedy development of rail transport. Diesel and electric engines have largely replaced the steam engines. In places **super fast trains** have been introduced to make the journey faster. The railway network is well developed over the plain areas. Advanced technological skills have enabled laying of railway lines in difficult mountain terrains also. But these are much fewer in number. Indian railway network is well developed. It is the largest in Asia.

**Do you know?** The Trans-Siberian Railway is the longest railway system connecting St. Petersburg in Western Russia to Vladivostok on the Pacific coast.

### Waterways

You have already learnt that since early days waterways were used for transportation. Waterways are the cheapest for carrying heavy and bulky goods over long distances. They are mainly of two types – **inland waterways** and **sea routes**.

Navigable rivers and lakes are used as inland waterways. Some of the important inland waterways are the Ganga-Brahmaputra river system, the Great Lakes in North America and the river Nile in Africa.

Sea routes and oceanic routes are mostly used for transporting merchandise and goods from one country to another. These routes are connected with the ports. Some of the important ports of the world are Singapore and Mumbai in Asia, New York, Los Angeles in North America, Rio de Janeiro in South America, Durban and Cape Town in Africa, Sydney in Australia, London and Rotterdam in Europe. Can you name some more ports of the world?

### Airways

This is the fastest way of transport developed in the early twentieth century. It is also the most expensive due to high cost of fuels. Air traffic is adversely affected by bad weather like fog and storms. It is the only mode of transport to reach the most remote and distant areas especially where there are no roads and railways. Helicopters are extremely useful in most inaccessible areas and in time of calamities for rescuing people and distributing food, water, clothes and medicines. Some of the important airports are Delhi, Mumbai, New York, London, Paris, Frankfurt and Cairo.

### Communication

**Communication** is the process of conveying messages to others. With the development of technology humans have devised new and fast modes of communication. The advancement in the field of communication has brought about an information revolution in the world. Different modes of communication are used to provide information, to educate as well as to entertain. Through newspapers, radio and television we can communicate with a large number of people. They are therefore called **mass media**. The satellites have made communication

even faster. Satellites have helped in oil exploration, survey of forest, underground water, mineral wealth, weather forecast and disaster warning. Now we can send electronic mails or e-mails through Internet. Wireless telephonic communications through cellular phones have become very popular today. Internet not only provides us with worldwide information and interaction but has also made our lives more comfortable. Now we can reserve tickets for railways, airways and even cinemas and hotels sitting at home. With this kind of inter connectivity of people, services and institutions – across the world, we are a large global society.

**Important Terms Settlement:** A place where people come to live or the process of settling in such a place **Site:** The place where a building or a settlement develops **Transhumance:** A seasonal movement of people in search of new pastures according to changes in seasons **Transport:** The means by which people and goods move **Communication:** The process of conveying messages to others **The mass media:** Newspapers, television, radio and the Internet

## Chapter 8

### Human Environment Interactions: The Tropical And Subtropical Region

#### Life in the Amazon Basin

Before learning about the Amazon basin, let us look at the map. Notice that the tropical region lies very close to the equator; between 10°N and 10°S. So, it is referred to as the equatorial region. The river Amazon flows through this region. Notice how it flows from the mountains to the west and reaches the Atlantic Ocean to the east.

**Do you know?** When Spanish explorers discovered the Amazon river, they were attacked by a group of local tribes wearing headgears and grass skirts. These people reminded them of the fierce tribes of women warriors known in ancient Roman Empire as the Amazons. Hence the name Amazon.

The place where a river flows into another body of water is called the river's mouth. Numerous tributaries join the Amazon River to form the Amazon basin. The river basin drains portions of Brazil, parts of Peru, Bolivia, Ecuador, Columbia and a small part of Venezuela.

Name the countries of the basin through which the equator passes.

#### Climate

As you now know, the Amazon Basin stretches directly on the equator and is characterized by hot and wet climate throughout the year. Both day and nights are almost equally hot and humid. The skin feels sticky. It rains almost everyday, that too without much warning. The day temperatures are high with very high humidity. At night the temperature goes down but the humidity remains high.

#### Rainforests

As it rains heavily in this region, thick forests grow. The forests are in fact so thick that the dense "roof" created by leaves and branches does not allow the sunlight to reach the ground. The ground remains dark and damp. Only shade tolerant vegetation may grow here. Orchids, bromeliads grow as plant parasites.

The rainforest is rich in fauna. Birds such as toucans, humming birds, bird of paradise with their brilliantly coloured plumage, oversized bills for eating make them different from birds we commonly see in India. These birds also make loud sounds in the forests. Animals like monkeys, sloth and ant-eating **tapirs** are found here.

**Do you know?** Bromeliads are special plants that store water in their leaves. Animals like frogs use these pockets of water for laying their eggs.

Various species of reptiles and snakes also thrive in these jungles. Crocodiles, snakes, pythons abound. Anaconda and boa constrictor are some of the species. Besides, the basin is home to thousands of species of insects. Several species of fishes including the flesh-eating Piranha fish is also found in the river. This basin is thus extraordinarily rich in the variety of life found there.

### People of the Rainforests

People grow most of their food in small areas after clearing some trees in the forest. While men hunt and fish along the rivers, women take care of the crops. They mainly grow tapioca, pineapple and sweet potato. As hunting and fishing are uncertain it is the women who keep their families alive by feeding them the vegetables they grow. They practice “slash and burn agriculture”. The staple food is manioc, also known as cassava that grows under the ground like the potato. They also eat queen ants and egg sacs. Cash crops like coffee, maize and cocoa are also grown.

The rainforests provide a lot of wood for the houses. Some families live in thatched houses shaped like beehives. There are other large apartment-like houses called “Maloca” with a steeply slanting roof.

**Do you know?** Slash and Burn is a way of cultivating land where farmers clear a piece of land by slashing or cutting down trees and bushes. These are then burnt, which releases the nutrients into the soil. Now crops are grown in this cleared field for a few years.

After repeatedly using the patch of land, the soil loses its nutrients. So it is abandoned. Then they clear another plot of land to plant. In the mean time young trees grow in the old field. In this way soil fertility is restored. People can then return to it and start cultivating it again. Life of the people of the Amazon basin is slowly changing. In the older days the heart of the forest, could be reached only by navigating the river. In 1970 the Trans Amazon highway made all parts of the rainforest accessible. Aircrafts and helicopters are also used for reaching various places. The indigenous population was pushed out from the area and forced to settle in new areas where they continued to practice their distinctive way of farming.

The developmental activities are leading to the gradual destruction of the biologically diverse rainforests. It is estimated that a large area of the rainforest has been disappearing annually in the Amazon basin. You can see that this destruction of forests has a much wider implication. The topsoil is washed away as the rains fall and the lush forest turns into a barren landscape.

### Life in the Ganga-Brahmaputra Basin

The tributaries of rivers Ganga and Brahmaputra together form the Ganga-Brahmaputra basin in the Indian subcontinent. The basin lies in the sub-tropical region that is situated between 10°N to 30°N latitudes. The tributaries of the River Ganga like the Ghaghra, the Son, the Chambal, the Gandak, the Kosi and the tributaries of Brahmaputra drain it. Look at the atlas and find names of some tributaries of the River Brahmaputra.

The plains of the Ganga and the Brahmaputra, the mountains and the foothills of the Himalayas and the Sundarbans delta are the main features of this basin. Ox-bow lakes dot the plain area. The area is dominated by monsoon climate. The monsoon brings rains from mid-June to mid-September. The summers are hot and the

winters cool.

**Glossary Population density:** It means the number of persons that live in one sq. km. of area e.g. the population density of Uttarakhand is 189 while the density of West Bengal is 1029 and that of Bihar is 1102. The basin area has varied topography. The environment plays a dominant role in the distribution of the population. The mountain areas with steep slopes have inhospitable terrain. Therefore less number of people live in the mountain area of the Ganga-Brahmaputra basin. The plain area provides the most suitable land for human habitation. The soil is fertile. Agriculture is the main occupation of the people where flat land is available to grow crops. The density of population of the plains is very high. The main crop is paddy. Since cultivation of paddy requires sufficient water, it is grown in the areas where the amount of rainfall is high.

Wheat, maize, sorghum, gram and millets are the other crops that are grown. Cash crops like sugarcane and jute are also grown. Banana plantations are seen in some areas of the plain. In West Bengal and Assam tea is grown in plantations. Silk is produced through the cultivation of silk worms in parts of Bihar and Assam. In the mountains and hills, where the slopes are gentle, crops are grown on terraces.

The vegetation cover of the area varies according to the type of landforms. In the Ganga and Brahmaputra plain tropical deciduous trees grow, along with teak, sal and peepal. Thick bamboo groves are common in the Brahmaputra plain. The delta area is covered with the mangrove forests. In parts of Uttarakhand, Sikkim and Arunachal Pradesh, coniferous trees like pine, deodar and fir can be seen because the climate is cool and the slopes are steep.

**Do you know?** Terraces are built on steep slopes to create flat surfaces on which crops are grown. The slope is removed so that water does not run off rapidly.

There is a variety of wildlife in the basin. Elephants, tigers, deer and monkeys are common. The one-horned rhinoceros is found in the Brahmaputra plain. In the delta area, Bengal tiger, crocodiles and alligator are found. Aquatic life abounds in the fresh river waters, the lakes and the Bay of Bengal Sea. The most popular varieties of the fish are the rohu, catla and hilsa. Fish and rice is the staple diet of the people living in the area.

**Do you know?** In the fresh waters of River Ganga and River Brahmaputra, a variety of dolphin locally called Susu (also called blind dolphin) is found. The presence of Susu is an indication of the health of the river. The untreated industrial and urban wastes with high amount of chemicals are killing this species.

The Ganga-Brahmaputra plain has several big towns and cities. The cities of Allahabad, Kanpur, Varanasi, Lucknow, Patna and Kolkata all with the population of more than ten lakhs are located along the River Ganga. The wastewater from these towns and industries is discharged into the rivers. This leads to the pollution of the rivers.

All the four ways of transport are well developed in the Ganga-Brahmaputra basin. In the plain areas the roadways and railways transport the people from one place to another. The waterways, is an effective means of transport particularly along the rivers. Kolkata is an important port on the River Hooghly. The plain area also has a large number of airports.

Tourism is another important activity of the basin. Taj Mahal on the banks of River Yamuna in Agra, Allahabad on the confluence of the Rivers Ganga and Yamuna, Buddhists stupas in Uttar Pradesh and Bihar, Lucknow with its Imambara, Assam with Kaziranga and Manas

with wild life sanctuaries and Arunachal Pradesh with a distinct tribal culture are some of the places worth a visit.

**Important Terms** **Basin:** The area drained by a river and its tributaries. **Rainforest:** A forest in a Tropical area that receives a lot of rain. **Slash and burn:** A way of cultivating land where farmers clear a piece of land by slashing or cutting down trees and bushes. **Mouth:** The place where a river flows into another body of water. **Delta:** An area of low, flat land where a river divides into several smaller rivers before flowing into the sea

## Chapter 9

### Life In The Temperate Grasslands

Just as a forest can be defined as the place where trees are the main type of vegetation, grassland can be defined as a region where grasses form the dominant type of plant life. Grasslands make up almost a quarter of the total land surface. The types of plants that grow here greatly depend on what the climate and soil are like. As climate plays an important role in the formation of grasslands, it is generally used as a basis to divide the **world's grasslands** into two broad categories: those that occur in the **temperate region** and those that occur in the **tropical regions**.

#### The Prairies

The word Prairie originated from Latin word priata which means meadow. The temperate grasslands of North America are known as the Prairies. It is a region of flat, gently sloping or hilly land. For the most part, prairies are treeless but, near the low lying plains, flanking river valleys, woodlands can be found. Tall grass, upto two metres high, dominates the landscape. It is actually a "sea of grass."

The prairies are bound by the Rocky Mountains in the West and the Great Lakes in the East. Look at the map of North America. You can see that the prairies cover parts of United States of America and parts of Canada. In the USA, the area is drained by the tributaries of Mississippi and the Canadian prairies are drained by the tributaries of Saskatchewan Rivers.

**Do you know?** The grasslands of Prairies were the home of native Americans often called "Red Indians". They were the actual habitants of the continent. The Prairies were home of other tribes also like the Apache, the Crow, the Cree and the Pawnee.

**Do you know?** Chinook is a hot wind that blows in winter and therefore raises the temperature within a short time. This increase in temperature results in the melting of snow, making pasture land available for grazing of animals.

#### Climate

Being located in the heart of a continent, the climate is of continental type with extreme temperatures. The summers are warm with temperatures of around 20°C, while in winter -20°C has been recorded in Winnipeg, Canada. In winters a thick blanket of snow covers this region.

The annual rainfall is moderate and is ideal for the growth of grass. Due to the absence of the north-south barrier, a local wind "Chinook" blows here.

#### Flora and Fauna

Prairies are practically tree-less. Where water is available, trees such as willows, alders and poplars grow. Places that receive rainfall of over 50 cm, are suitable for farming as the soil is fertile. Though the major crop of this area is maize, other crops including potatoes, soybean, cotton and alfalfa is also grown. Areas where rainfall is very little or unreliable, grasses are short and sparse. These areas are suitable for cattle rearing. Large

cattle farms called **ranches** are looked after by sturdy men called cowboys.

**Bison** or the American buffalo is the most important animal of this region. It nearly got extinct due to its indiscriminate hunting and is now a protected species. The other animals found in this region are rabbits, coyotes, gophers and Prairie dog.

#### People

The people of this region are very hardworking. They have successfully harnessed technology to utilise their rich natural resources. Two of the most developed countries in the world - the USA and Canada are located in this region. Scientific methods of cultivation and use of tractors, harvesters and combines has made North America a surplus food producer. The Prairies are also known as the "Granaries of the world," due to the huge surplus of wheat production.

Dairy farming is another major industry. The dairy belt extends from the Great Lakes to the Atlantic Coast in the east. Dairy farming and extensive agriculture both promote setting up of food processing industries. Large mineral deposits particularly coal and iron and a good network of roads, railways and canals in this region have made it the most industrialised region in the world.

**Do you know?** Important cities in the American prairies are Chicago, Minneapolis, Indianapolis, Kansas and Denver. In the Canadian prairies the important cities are Edmonton, Saskatoon, Calgary and Winnipeg.

#### The Velds

The temperate grasslands of South Africa are called the **velds**. Velds are rolling plateaus with varying heights ranging from 600 m to 1100 m. To its west lies the Drakensburg Mountains on the east. To its west lies the Kalahari desert. On the northeastern part, "high velds" are located that attain a height of more than 1600 m, in some places. Look at the map of Africa. Name the countries that are covered by the Velds. The tributaries of rivers Orange and Limpopo drain the region.

**Do you know?** The Veld name was given by the Dutch settlers before South Africa was colonised by the British.

#### Climate

The velds have a mild climate due to the influence of the Indian Ocean. Winters are cold and dry. Temperatures vary between 5°C and 10°C and July is the coldest month. Summers are short and warm. Johannesburg records about 20°C temperature in the summer. The velds receive rainfall mainly in the summer months from November to February. This is mainly because of the warm ocean currents that wash the shores of the velds. If the rainfall is scanty in the winter months from June till August, drought may occur.

#### Flora and Fauna

The vegetation cover is sparse. Grasses dominate the landscape. Red grass grows in bush velds. In the high velds acacia and maroola are seen to be growing. The animals of the velds are primarily lions, leopards, cheetah and kudu.

#### People

Velds are known for cattle rearing and mining. The soils are not very fertile in the velds due to the presence of discontinuous grasses exposing barren surface. However where the land is fertile crops are grown. The main crops are maize, wheat, barley, oats and potato. Cash crops like tobacco, sugarcane and cotton are also grown.

Sheep rearing is the most important occupation of the people. Sheep is bred mainly for wool and has given rise to the wool industry in the velds. Merino sheep is a



popular species and their wool is very warm. Dairy farming is the next important occupation. Cattle are reared in the warmer and wetter regions and the dairy products like butter, cheese are produced for both domestic supply and also for export.

The velds have rich reserve of minerals. Iron and steel industry has developed where coal and iron are present. Gold and diamond mining are major occupations of people of this region. Johannesburg is known for being the gold capital of the world. Kimberley is famous for its diamond mines. Mining of diamond and gold in South Africa led to the establishment of trade ties with Britain and gradually South Africa became a British Colony. This mineral rich area has a well-developed network of transport.

**Important Terms** **Prairie:** A large open area of grassland, especially in North America. **Veld:** Open, uncultivated grassland in Southern Africa. **Combine:** A large farming machine that cuts the plant, separates the seed from the stem, and cleans the grain as it moves across a field. **Ranch:** A large farm in North America, where cattle or other animals are bred. **Flora and fauna:** Plants and animals of a place. **Bison:** American buffalo.

## Chapter 10 Life In The Deserts

We will now learn about the places in the world where people have learned to cope with extreme harsh temperatures; in some places as hot as fire and some as cold as ice. These are the desert areas of the world. These are characterised by low rainfall, scanty vegetation and extreme temperatures. Depending on the temperatures there can be hot deserts or cold deserts. The people inhabit these lands wherever little water is available to practise agriculture.

### The Hot Desert – Sahara

Look at the map of the world and the continent of Africa. Locate the Sahara desert covering a large part of North Africa. It is the world's largest desert. It has an area of around 8.54 million sq. km. Do you recall that India has an area of 3.2 million sq. km? The Sahara desert touches eleven countries. These are Algeria, Chad, Egypt, Libya, Mali, Mauritania, Morocco, Niger, Sudan, Tunisia and Western Sahara.

When you think of a desert the picture that immediately comes to your mind is that of sand. But besides the vast stretches of sands, that Sahara desert is covered with, there are also gravel plains and elevated plateaus with bare rocky surface. These rocky surfaces may be more than 2500m high at some places.

**Do you know?** You will be surprised to know that present day Sahara once used to be a lush green plain. Cave paintings in Sahara desert show that there used to be rivers with crocodiles. Elephants, lions, giraffes, ostriches, sheep, cattle and goats were common animals. But the change in climate has changed it to a very hot and dry region.

### Climate

The climate of the Sahara desert is scorching hot and parch dry. It has a short rainy season. The sky is cloudless and clear. Here, the moisture evaporates faster than it accumulates. Days are unbelievably hot. The temperatures during the day may soar as high as 50°C, heating up the sand and the bare rocks, which in turn radiates heat making everything around hot. The nights may be freezing cold with temperatures nearing zero degrees.

**Do you know?** Al Azizia in the Sahara desert, south of Tripoli, Libya recorded the highest temperature of 57.7°C in 1922.

### Flora and Fauna

Vegetation in the Sahara desert includes cactus, date palms and acacia. In some places there are oases – green islands with date palms surrounding them. Camels, hyenas, jackals, foxes, scorpions, many varieties of snakes and lizards are the prominent animal species living there.

**Do you know?** Scientists have actually found skeletons of fish in this desert. What could have happened?

### People

The Sahara desert despite its harsh climate has been inhabited by various groups of people, who pursue different activities. Among them are the Bedouins and Tuaregs. These groups are nomadic tribes rearing livestock such as goats, sheep, camels and horses. These animals provide them with milk, hides from which they make leather for belts, slippers, water bottles; hair is used for mats, carpets, clothes and blankets. They wear heavy robes as protection against dust storms and hot winds.

The oases in the Sahara and the Nile Valley in Egypt supports settled population. Since water is available, the people grow date palms. Crops such as rice, wheat, barley and beans are also grown. Egyptian cotton, famous worldwide is grown in Egypt.

The discovery of oil – a product in great demand throughout the world, in Algeria, Libya and Egypt is constantly transforming the Sahara desert. Other minerals of importance that are found in the area include iron, phosphorus, manganese and uranium. The cultural landscape of the Sahara is undergoing change. Gleaming glass cased office buildings tower over mosques and superhighways crisscross the ancient camel paths. Trucks are replacing camels in the salt trade. Tuaregs are seen acting as guides to foreign tourists. More and more nomadic herdsmen are taking to city life finding jobs in oil and gas operations.

**Do you know?** Depressions are formed when the wind blows away the sands. In the depressions where underground water reaches the surface, an oasis is formed. These areas are fertile. People may settle around these water bodies and grow date palms and other crops. Sometimes the oasis may be abnormally large. Tafilalet Oasis in Morocco is a large oasis with an area of about 13,000 sq.km.

### The Cold Desert - Ladakh

Ladakh is a **cold desert** lying in the Great Himalayas, on the eastern side of Jammu and Kashmir. The **Karakoram Range** in the north and the **Zaskar mountains** in the south enclose it. Several rivers flow through Ladakh, **Indus** being the most important among them. The rivers form deep valleys and gorges. Several glaciers are found in Ladakh, for example the **Gangri** glacier.

### Word Origin

Ladakh is made up of two words – “La” meaning ‘mountain pass’ and “Dak” meaning ‘country’. The altitude in Ladakh varies from about 3000m in **Kargil** to more than 8,000m in the Karakoram. Due to its high altitude, the climate is extremely cold and dry. The air at this altitude is so thin that the heat of the sun can be felt intensely. The day temperatures in summer are just above zero degree and the night temperatures well below –30°C. It is freezing cold in the winters when the temperatures may remain below –40°C for most of the time. As it lies in the rain shadow of the Himalayas, there is little rainfall, as low as 10 cm every year. The area experiences freezing winds and burning hot sunlight. You will be surprised to know that if you sit in the sun with your feet in the shade, you may suffer from

both sunstroke and frost bite at the same time.

**Do you know?** Drass, one of the coldest inhabited places on earth is located in Ladakh. Ladakh is also known as **Khapa-chan** which means snow land.

### Flora and Fauna

Due to high aridity, the vegetation is sparse. There are scanty patches of grasses and shrubs for animals to graze. Groves of willows and poplars are seen in the valleys. During the summers, fruit trees such as apples, apricots and walnuts bloom. Several species of birds are sighted in Ladakh. Robins, redstarts, Tibetan snowcock, raven and hoopoe are common. Some of these are migratory birds. The animals of Ladakh are wild goats, wild sheep, yak and special kinds of dogs. The animals are reared to provide for the milk, meat and hides. Yak's milk is used to make cheese and butter. The hair of the sheep and goat is used to make woollens.

**Do you know?** The Chiru or the Tibetan antelope is an endangered species. It is hunted for its wool known as shahtoosh, which is light in weight and extremely warm.

### People

Do you find any resemblance between the people of Ladakh and the inhabitants of Tibet and Central Asia? The people here are either Muslims or Buddhists. In fact several Buddhists monasteries dot the Ladakhi landscape with their traditional 'gompas'. Some famous monasteries are Hemis, Thiksey, Shey and Lamayuru. In the summer season the people are busy cultivating barley, potatoes, peas, beans and turnip. The climate in winter months is so harsh that people keep themselves engaged in festivities and ceremonies. The women are

very hard working. They work not only in the house and fields, but also manage small business and shops. Leh, the capital of Ladakh is well connected both by road and air. The National Highway 1A connects Leh to Kashmir Valley through the Zoji la Pass. Can you name some more passes in the Himalayas?

**Do you know?** The finest cricket bats are made from the wood of the willow trees.

Tourism is a major activity with several tourists streaming in from within India and abroad. Visits to the gompas, treks to see the meadows and glaciers, witnessing ceremonies and festivities are important activities.

Life of people is undergoing change due to modernisation. But the people of Ladakh have over the centuries learned to live in balance and harmony with nature. Due to scarcity of resources like water and fuel, they are used with reverence and care. Nothing is discarded or wasted.

**Do you know?** Manali - Leh highway crosses four passes, Rohtang la, Baralacha la, Lungalacha la and Tanglang la. The highway opens only between July and September when snow is cleared from the road.

**Important Terms** **Desert:** An arid region where there is very little rain and not many plants. **Oasis:** A small area in a desert where water and plants are found. **Glacier:** A large mass of ice that moves slowly. **Grove:** A group of trees planted close together. **Monastery:** A building in which monks live and worship. **Gompa:** A Buddhist monastery, located in Tibet, Ladakh (India), Nepal and Bhutan.

# NCERT Class 8

## Goegraphy (Resource and Development)

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 Resources

Some resources can become economically valuable with time. Your grandmother's home remedies have no commercial value today. But if they are patented and sold by a medical firm tomorrow, they could become economically valuable.

Time and technology are two important factors that can change substances into resources. Both are related to the needs of the people. People themselves are the most important resource. It is their ideas, knowledge, inventions and discoveries that lead to the creation of more resources. Each discovery or invention leads to many others. The discovery of fire led to the practice of cooking and other processes while the invention of the wheel ultimately resulted in development of newer modes of transport. The technology to create hydroelectricity has turned energy in fast flowing water into an important resource.

#### Types of Resources

Resources are generally classified into natural, human made and human.

#### Natural Resources

Resources that are drawn from Nature and used without much modification are called **natural resources**. The air we breathe, the water in our rivers and lakes, the soils, minerals are all natural resources. Many of these resources are free gifts of nature and can be used directly. In some cases tools and technology may be needed to use a natural resource in the best possible way.

Natural resources are classified into different groups depending upon their **level of development** and **use**; **origin**; **stock** and **distribution**.

On the basis of their development and use resources can be classified into two groups, **actual** resources and **potential** resources.

**Actual resources** are those resources whose quantity is known. These resources are being used in the present. The rich deposits of coal in Ruhr region of Germany and petroleum in the West Asia, the dark soils of the Deccan plateau in Maharashtra are all actual resources.

**Potential resources** are those whose entire quantity may not be known and these are not being used at present. These resources could be used in the future. The level of technology we have at present may not be advanced enough to easily utilise these resources. The uranium found in Ladakh is an example of potential resource that could be used in the future. High speed winds were a potential resource two hundred years ago. Today they are an actual resource and wind farms generate energy using windmills like in Netherlands. You will find some in Nagercoil in Tamil Nadu and on

the Gujarat coast.

Based on their **origin**, resources can be **abiotic** or **biotic**. Abiotic resources are non-living while biotic resources are living. Soils, rocks and minerals are abiotic but plants and animals are biotic resources.

Natural resources can be broadly categorised into **renewable** and **non-renewable** resources.

Renewable resources are those which get renewed or replenished quickly. Some of these are unlimited and are not affected by human activities, such as solar and wind energy. Yet careless use of certain renewable resources like water, soil and forest can affect their stock. Water seems to be an unlimited renewable resource. But shortage and drying up of natural water sources is a major problem in many parts of the world today.

**Non-renewable resources** are those which have a limited stock. Once the stocks are exhausted it may take thousands of years to be renewed or replenished. Since this period is much more than human life spans, such resources are considered non-renewable. Coal, petroleum and natural gas are some examples.

On the basis of their distribution resources can be **ubiquitous** or **localised**. Resources that are found everywhere like the air we breathe, are ubiquitous. But those which are found only in certain places are localised, like copper and iron ore.

The distribution of natural resources depends upon number of physical factors like terrain, climate and altitude. The distribution of resources is unequal because these factors differ so much over the earth.

#### Human Made Resources

Sometimes, natural substances become resources only when their original form has been changed. Iron ore was not a resource until people learnt to extract iron from it. People use natural resources to make buildings, bridges, roads, machinery and vehicles, which are known as **human made resources**. Technology is also a human made resource.

"So people like us use natural resources to make human made resources," said Mona nodding in understanding. "Yes," said Raju.

Do you know? Human Resource refers to the number (quantity) and abilities (mental and physical) of the people. Though, there are differing views regarding treatment of humans as a resource, one cannot deny the fact that it is the skills of human that help in transferring the physical material into a valuable resource.

#### Human Resources

People can make the best use of nature to create more resources when they have the knowledge, skill and the technology to do so. That is why human beings are a special resource. **People are human resources**. Education and health help in making people a valuable resource. Improving the quality of people's skills so that



they are able to create more resources is known as **human resource development**.

### Conserving Resources

Mona had a nightmare. She dreamt that all the water on the earth had dried up and all the trees cut down. There was no shade and nothing to eat or drink. People were suffering and roaming around desperately looking for food and shade.

**Sustainable Development** Carefully utilising resources so that besides meeting the requirements of the present, also takes care of future generations. Using resources carefully and giving them time to get renewed is called **resource conservation**. Balancing the need to use resources and also conserve them for the future is called **sustainable development**. There are many ways of conserving resources. Each person can contribute by reducing consumption, recycling and reusing things. Ultimately it makes a difference because all our lives are linked.

### Some Principles of Sustainable Development

1. Respect and care for all forms of life
2. Improve the quality of human life
3. Conserve the earth's vitality and diversity
4. Minimise the depletion of natural resources
5. Change personal attitude and practices towards the environment
6. Enable communities to care for their own environment.

These are some of the things Mona, Raju and their friends did. What about you? How are you going to help in conserving resources?

The future of our planet and its people is linked with our ability to maintain and preserve the life support system that nature provides. Therefore it is our duty to ensure that:

- all uses of renewable resources are sustainable
- the diversity of life on the earth is conserved
- the damage to natural environmental system is minimised.

**Important Terms.** **Patent:** An exclusive right over an idea, product or invention. **Technology:** The application of latest know how and skills in making or doing things. **Human Resource Development:** This refers to making improvement in human skills so that they can become more useful and productive and thus, become a better resource. **Stock of Resource:** The quantity or amount of resource available for mankind is known as its stock. **Resource Conservation:** This refers to the concept of using resources in a sensible way ensuring that they do not get diminished. **Sustainable Development:** The concept of using resources in a balanced form so that our needs are fulfilled and they also remain conserved for the use by future generations.

## Chapter 2

### Land, Soil, Water, Natural Vegetation And Wildlife Resources

**Do you know?** Ninety per cent of the world population occupies only thirty per cent of land area. The remaining seventy per cent of the land is either sparsely populated or uninhabited.

### Land

Land is among the most important natural resources. It covers only about thirty per cent of the total area of the earth's surface and all parts of this small percentage are not habitable.

The uneven distribution of population in different parts of the world is mainly due to varied characteristics of land and climate. The rugged topography, steep slopes of the mountains, low-lying areas susceptible to water

logging, desert areas, thick forested areas are normally sparsely populated or uninhabited. Plains and river valleys offer suitable land for agriculture. Hence, these are the densely populated areas of the world.

### Land Use

Land is used for different purposes such as agriculture, forestry, mining, building houses, roads and setting up of industries. This is commonly termed as **Land use**. Can you list out the different ways in which Mamba's and Peter's family use their land?

The use of land is determined by physical factors such as topography, soil, climate, minerals and availability of water. Human factors such as population and technology are also important determinants of land use pattern.

### Land use in selected countries

Land can also be classified on the basis of ownership as – private land and community land. Private land is owned by individuals whereas, community land is owned by the community for common uses like collection of fodder, fruits, nuts or medicinal herbs. These community lands are also called **common property resources**.

People and their demands are ever growing but the availability of land is limited. The quality of land also differs from place to place. People started encroaching the common lands to build up commercial areas, housing complexes in the urban areas and to expand the agricultural land in the rural areas. Today the vast changes in the land use pattern also reflect the cultural changes in our society. Land degradation, landslides, soil erosion, desertification are the major threats to the environment because of the expansion of agriculture and construction activities.

Countries	Percentage of area in			
	Cropland	Pasture	Forest	Other Use
Australia	6	56	14	24
Brazil	9	20	66	5
Canada	5	4	39	52
China	10	34	14	42
France	35	21	27	17
India	57	4	22	17
Japan	12	2	67	19
Russia	8	5	44	44
UK	29	46	10	16
USA	21	26	32	21
<b>World</b>	<b>11</b>	<b>26</b>	<b>31</b>	<b>32</b>

Study the above table and answer the following:

- Name the countries having the highest percentage of land under cropland, forest, pasture and other uses.
- How would you relate the land use patterns of these countries with the probable economic activities?

### Conservation of Land Resource

Growing population and their ever growing demand has led to a large scale destruction of forest cover and arable land and has created a fear of losing this natural resource. Therefore, the present rate of degradation of land must be checked. Afforestation, land reclamation, regulated use of chemical pesticide and fertilisers and checks on overgrazing are some of the common methods used to conserve land resources.

### Landslides

Landslides are simply defined as the mass movement of rock, debris or earth down a slope. They often take place in conjunction with earthquakes, floods and volcanoes. A prolonged spell of rainfall can cause heavy landslide that can block the flow of river for quite some time. The formation of river blocks can cause havoc to the settlements downstream on its bursting. In the hilly

terrain landslides have been a major and widely spread natural disaster that often strike life and property and occupy a position of major concern.

### Mitigation Mechanism

Advancement in scientific techniques has empowered us to understand what factors cause landslides and how to manage them. Some broad mitigation techniques of landslide are as follows:

- Hazard mapping to locate areas prone to landslides. Hence, such areas can be avoided for building settlements.
- Construction of retention wall to stop land from slipping.
- Increase in the vegetation cover to arrest landslide.
- The surface drainage control works to control the movement of landslide along with rain water and spring flows.

### Soil

The thin layer of grainy substance covering the surface of the earth is called soil. It is closely linked to land. Landforms determine the type of soil. Soil is made up of organic matter, minerals and weathered rocks found on the earth. This happens through the process of weathering. The right mix of minerals and organic matter make the soil fertile.

**Weathering:** The breaking up and decay of exposed rocks, by temperature changes, frost action, plants, animals and human activity.

### Factors of Soil Formation

The major factors of **soil formation** are the nature of the parent rock and climatic factors. Other factors are the topography, role of organic material and time taken for the composition of soil formation. All these differ from place to place.

### Degradation of Soil and Conservation Measures

Soil erosion and depletion are the major threats to soil as a resource. Both human and natural factors can lead to degradation of soils. Factors which lead to soil degradation are deforestation, overgrazing, overuse of chemical fertilisers or pesticides, rain wash, landslides and floods.

Some methods of soil conservation are listed below:

**Mulching:** The bare ground between plants is covered with a layer of organic matter like straw. It helps to retain soil moisture.

**Contour barriers:** Stones, grass, soil are used to build barriers along contours. Trenches are made in front of the barriers to collect water.

**Rock dam:** Rocks are piled up to slow down the flow of water. This prevents gullies and further soil loss.



Fig 2.5: Terrace Farming



Fig 2.6: Contour Ploughing

**Terrace farming:** Broad flat steps or terraces are made on the steep slopes so that flat surfaces are available to grow crops. They reduce surface run-off and soil erosion.

**Intercropping:** Different crops are grown in alternate rows and are sown at different times to protect the soil from rain wash.

**Contour ploughing:** Ploughing parallel to the contours of a hill slope to form a natural barrier for water to flow down the slope.

**Shelter belts:** In the coastal and dry regions, rows of trees are planted to check the wind movement to protect soil cover.

### Water

Water is a vital renewable natural resource. Three-fourth's of the earth's surface is covered with water. It is therefore appropriately called the 'water planet'.

It was in the primitive oceans that life began almost 3.5 billion years back. Even today, the oceans cover two-thirds of the earth's surface and support a rich variety of plant and animal life. The ocean water is however saline and not fit for human consumption.

Fresh water accounts for only about 2.7 per cent. Nearly 70 per cent of this occurs as ice sheets and glaciers in Antarctica, Greenland and mountain regions. Due to their location they are inaccessible. Only 1 per cent of freshwater is available and fit for human use. It is found as ground water, as surface water in rivers and lakes and as water vapour in the atmosphere.

Fresh water is therefore, the most precious substance on earth. Water can neither be added nor subtracted from the earth. Its total volume remains constant. Its abundance only seems to vary because it is in constant motion, cycling through the oceans, the air, the land and back again, through the processes of evaporation, precipitation and run-off. This as you already know is referred to as the 'water cycle'. Humans use huge amounts of water not only for drinking and washing but also in the process of production. Water for agriculture, industries, generating electricity through reservoirs of dams are the other usages. Increasing population, rising demands for food and cash crops, increasing urbanisation and rising standards of living are the major factors leading to shortages in supply of fresh water either due to drying up of water sources or water pollution.

### Problems of Water Availability

There is scarcity of water in many regions of the world. Most of Africa, West Asia, South Asia, parts of western USA, north-west Mexico, parts of South America and entire Australia are facing shortages in fresh water supply. Countries located in climatic zones most susceptible to droughts face great problems of water scarcity. Thus, water shortage may be a consequence of variation in seasonal or annual precipitation or the scarcity is caused by over-exploitation and

contamination of water sources.

### Conservation of Water Resources

Access to clean and adequate water sources is a major problem facing the world today. Steps have to be taken to conserve this dwindling resource. Even though water is a renewable resource, its overuse and pollution make it unfit for use. Discharge of untreated or partially treated sewage, agricultural chemicals and industrial effluents in water bodies are major contaminants. They pollute water with nitrates, metals and pesticides. Most of these chemicals are non-biodegradable and reach human bodies through water. Water pollution can be controlled by treating these effluents suitably before releasing them in water bodies.

Forest and other vegetation cover slow the surface runoff and replenish underground water. Water harvesting is another method to save surface runoff. The canals used for irrigating field should be properly lined to minimise losses by water seepage. Sprinklers effectively irrigate the area by checking water losses through seepage and evaporation. In dry regions with high rates of evaporation, drip or trickle irrigation is very useful. The valuable water resource can therefore be conserved by adopting these means of conservation.

### Natural Vegetation and Wildlife

Do you know? Rain water harvesting is the process of collecting rain water from roof tops and directing it to an appropriate location where it is stored for future use. On an average, one spell of rain for two hours is enough to save 8,000 litres of water.

Natural vegetation and wildlife exist only in the narrow zone of contact between the lithosphere, hydrosphere and atmosphere that we call **biosphere**. In the biosphere living beings are inter-related and interdependent on each other for survival. This life supporting system is known as the **ecosystem**.

Vegetation and wildlife are valuable resources. Plants provide us with timber, give shelter to animals, produce oxygen we breathe, protects soils so essential for growing crops, act as shelter belts, help in storage of underground water, give us fruits, nuts, latex, turpentine oil, gum, medicinal plants and also the paper that is so essential for your studies. There are innumerable uses of plants and you can add some more.

Wildlife includes animals, birds, insects as well as the aquatic life forms. They provide us milk, meat, hides and wool. Insects like bees provide us honey, help in pollination of flowers and have an important role to play as decomposers in the ecosystem. The birds feed on insects and act as decomposers as well. Vulture due to its ability to feed on dead livestock is a scavenger and considered a vital cleanser of the environment. So animals big or small, all are integral to maintaining balance in the ecosystem.

Do you know? Vultures in the Indian subcontinent were dying of kidney failure shortly after scavenging livestock treated with diclofenac, a painkiller that is similar to aspirin or ibuprofen. Efforts are on to ban the drug for livestock use and breed vultures in captivity.

### Distribution of Natural Vegetation

The growth of vegetation depends primarily on temperature and moisture. The major vegetation types of the world are grouped as forests, grasslands, scrubs and tundra.

In areas of heavy rainfall, huge trees may thrive. The forests are thus associated with areas having abundant water supply. As the amount of moisture decreases the size of trees and their density reduces. Short stunted trees and grasses grow in the regions of moderate rainfall forming the grasslands of the world. Thorny

shrubs and scrubs grow in dry areas of low rainfall. In such areas plants have deep roots and leaves with thorny and waxy surface reduce loss of moisture through transpiration. Tundra vegetation of cold Polar Regions comprise of mosses and lichens.

Forests are broadly classified as **evergreen** and **deciduous** depending on when they shed their leaves. Evergreen forests do not shed their leaves simultaneously in any season of the year. Deciduous forests shed their leaves in a particular season to conserve loss of moisture through transpiration. Both type of forests are further classified as tropical or temperate based on their location in different latitudes. You have learnt in detail about the various forest types, their distribution and the associated animal life in the previous class.

Today there are many more people in the world than there were two centuries back. To feed the growing numbers, large areas of forests have been cleared to grow crops. Forest cover all over the world is vanishing rapidly. There is an urgent need to conserve this valuable resource.

### Conservation of Natural Vegetation and Wildlife

Forests are our wealth. Plants give shelter to the animals and together they maintain the ecosystem. Changes of climate and human interferences can cause the loss of natural habitats for the plants and animals. Many species have become vulnerable or endangered and some are on the verge of extinction. Deforestation, soil erosion, constructional activities, forest fires, tsunami and landslides are some of the human and natural factors which accelerate the process of extinction of these resources. One of the major concerns is the poaching which result in a sharp decline in the number of particular species. The animals are poached for collection and illegal trade of hides, skins, nails, teeth, horns as well as feathers. Some of these animals are tiger, lion, elephant, deer, black buck, crocodile, rhinoceros, snow leopard, ostrich and peacock. These can be conserved by increasing awareness.

### Forest Fire

#### Know More

Forest fire is a threat to the entire region of fauna and flora. It occurs mainly due to three reasons:

1. Natural fire due to lightning etc.
2. Fire due to heat generated in the litter due to carelessness of people.
3. Fire purposely caused by local inhabitants, mischief makers, miscreants etc.

### Some Control Measures

1. Prevention of fires through education.
2. Prompt detection of fires through well co-ordinated network of observation points, efficient ground patrolling and communication network.

National parks, wildlife sanctuaries, biosphere reserves are made to protect our natural vegetation and wildlife. Conservation of creeks, lakes, and wetlands is necessary to save the precious resource from depletion.

*Biosphere reserves: Series of protected areas linked through a global network, intended to demonstrate the relationship between conservation and development.*

*National Park: A natural area designated to protect the ecological integrity of one or more ecosystems for the present and the future generations*

There is a balance in the environment if the relative number of species is not disturbed. Human activities in several parts of the world have disturbed the natural habitats of many species. Due to indiscriminate killings, several birds and animals have either become extinct or



are on the verge of extinction.

Awareness programmes like social forestry and Vanamahatasa should be encouraged at the regional and community level. School children should be encouraged to bird watch and visit nature camps so that they appreciate the habitat of varied species.

Many countries have passed laws against the trade as well as killing of birds and animals. In India, killing lions, tigers, deers, great Indian bustards and peacocks is illegal.

An international convention CITES has been established that lists several species of animals and birds in which trade is prohibited. Conservation of plants and animals is an ethical duty of every citizen.

Do you know? CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) is an international agreement between governments. It aims to ensure that international trade in specimens of wild animals and plants does not threaten their survival. Roughly 5,000 species of animals and 28,000 species of plants are protected. Bears, dolphins, cacti, corals, orchids and aloes are some examples.

**Important Terms Ecosystem:** This is the supportive and interdependent life system which exists in the biosphere.

**Wildlife:** Animal kingdom, which includes animals, birds, aquatic creatures and insects. **Land use:** The way in which a respective piece of land is put to use. **Deforestation:** The action of cutting down trees. **Afforestation:** The action of planting trees. **Parent rock:** The original rock from which a particular soil is formed is known as its parent rock. **Fresh water:** Water which is fit for human consumption. **Water cycle:** The natural process of constant motion of water by evaporation, condensation and rainfall is known as the water cycle. **Biosphere:** It is the narrow zone of contact between the lithosphere, hydrosphere and atmosphere. **Tundra:** The type of vegetation found in extremely cold regions such as the Arctic. **Scavenger:** A bird or animal which derives food from dead livestock. **Evergreen forests:** Those forests where trees never shed their leaves. **Deciduous forests:** Those forests where trees shed their leaves once at a particular time of the year. **National parks:** A natural area dedicated to protect the ecological integrity of ecosystem(s) for the present and future generations. **Vanamahatasa:** The social programme of planting trees, organized at community level. **Biosphere reserves:** Series of protected areas linked by a global network, which demonstrate the relationship between conservation and development. **Wildlife sanctuaries:** This is similar to a national park, but is aimed at protection of a particular animal or general wildlife.

## Chapter 3 Mineral And Power Resources

Rocks on this earth have several materials called minerals mixed in them. These minerals are scattered throughout the earth's rocky crust.

A naturally occurring substance that has a definite chemical composition is a **mineral**. Minerals are not evenly distributed over space. They are concentrated in a particular area or rock formations. Some minerals are found in areas which are not easily accessible such as the Arctic ocean bed and Antarctica.

Minerals are formed in different types of geological environments, under varying conditions. They are created by natural processes without any human interference. They can be identified on the basis of their physical properties such as colour, density, hardness and chemical property such as solubility.

**Do you know?** A rock is an aggregate of one or more minerals but without definite composition of constituent of mineral. Rocks from which minerals are mined are known as ores. Although more than 2,800 types of minerals have been identified, only about 100 are considered ore minerals. Thus

one can easily notice that all minerals are rocks but all rocks are not minerals.

### Types of Minerals

There are over three thousand different minerals. On the basis of composition, minerals are classified mainly as metallic and non-metallic minerals.

**Metallic** minerals contain metal in raw form. Metals are hard substances that conduct heat and electricity and have a characteristic lustre or shine. Iron ore, bauxite, manganese ore are some examples. Metallic minerals may be ferrous or non-ferrous. **Ferrous** minerals like iron ore, manganese and chromites contain iron. A **non-ferrous** mineral does not contain iron but may contain some other metal such as gold, silver, copper or lead.

**Non-metallic** minerals do not contain metals.

Limestone, mica and gypsum are examples of such minerals. The mineral fuels like coal and petroleum are also non-metallic minerals.

Minerals can be extracted by mining, drilling or quarrying.

The process of taking out minerals from rocks buried under the earth's surface is called **mining**. Minerals that lie at shallow depths are taken out by removing the surface layer; this is known as **open-cast mining**. Deep bores, called **shafts**, have to be made to reach mineral deposits that lie at great depths. This is called **shaft mining**. Petroleum and natural gas occur far below the earth's surface. Deep wells are bored to take them out, this is called **drilling**. Minerals that lie near the surface are simply dug out, by the process known as **quarrying**.

### Distribution of Minerals

Minerals occur in different types of rocks. Some are found in igneous rocks, some in metamorphic rocks while others occur in sedimentary rocks. Generally, metallic minerals are found in igneous and metamorphic rock formations that form large plateaus. Iron-ore in north Sweden, copper and nickel deposits in Ontario, Canada, iron, nickel, chromites and platinum in South Africa are examples of minerals found in igneous and metamorphic rocks. Sedimentary rock formations of plains and young fold mountains contain non-metallic minerals like limestone. Limestone deposits of Caucasus region of France, manganese deposits of Georgia and Ukraine and phosphate beds of Algeria are some examples. Mineral fuels such as coal and petroleum are also found in the sedimentary strata.

### Asia

China and India have large iron ore deposits. The continent produces more than half of the world's tin. China, Malaysia and Indonesia are among the world's leading tin producers. China also leads in production of lead, antimony and tungsten. Asia also has deposits of manganese, bauxite, nickel, zinc and copper.

### Europe

Europe is the leading producer of iron-ore in the world. The countries with large deposits of iron ore are Russia, Ukraine, Sweden and France. Minerals deposits of copper, lead, zinc, manganese and nickel are found in eastern Europe and European Russia.

Do you know? Switzerland has no known mineral deposit in it.

### North America

The mineral deposits in North America are located in three zones: the Canadian region north of the Great Lakes, the Appalachian region and the mountain ranges of the west. Iron ore, nickel, gold, uranium and copper are mined in the Canadian Shield Region, coal in the Appalachians region. Western Cordilleras have vast deposits of copper, lead, zinc, gold and silver.

### South America

Brazil is the largest producer of high grade iron-ore in the world. Chile and Peru are leading producers of copper. Brazil and Bolivia are among the world's largest producers of tin. South America also has large deposits of gold, silver, zinc, chromium, manganese, bauxite, mica, platinum, asbestos and diamond. Mineral oil is found in Venezuela, Argentina, Chile, Peru and Columbia.

The oldest rocks in the world are in Western Australia. They date from 4,300 million years ago, only 300 million years after the earth was formed.

### Africa

Africa is rich in mineral resources. It is the world's largest producer of diamonds, gold and platinum. South Africa, Zimbabwe and Zaire produce a large portion of the world's gold. The other minerals found in Africa are copper, iron ore, chromium, uranium, cobalt and bauxite. Oil is found in Nigeria, Libya and Angola.

### Australia

Australia is the largest producer of bauxite in the world. It is a leading producer of gold, diamond, iron ore, tin and nickel. It is also rich in copper, lead, zinc and manganese. Kalgoorlie and Coolgardie areas of western Australia have the largest deposits of gold.

### Antarctica

The geology of Antarctica is sufficiently well known to predict the existence of a variety of mineral deposits, some probably large. Significant size of deposits of coal in the Transantarctic Mountains and iron near the Prince Charles Mountains of East Antarctica is forecasted. Iron ore, gold, silver and oil are also present in commercial quantities.

### Distribution in India

**Iron:** India has deposits of high grade iron ore. The mineral is found mainly in Jharkhand, Odisha, Chhattisgarh, Madhya Pradesh, Goa, Maharashtra and Karnataka.

**Bauxite:** Major bauxite producing areas are Jharkhand, Odisha, Chhattisgarh, Madhya Pradesh, Gujarat, Maharashtra and Tamil Nadu.

**Mica:** Mica deposits mainly occur in Jharkhand, Bihar, Andhra Pradesh and Rajasthan. India is the largest producer and exporter of mica in the world.

**Copper:** It is mainly produced in Rajasthan, Madhya Pradesh, Jharkhand, Karnataka and Andhra Pradesh.

**Manganese:** India's manganese deposits lie in Maharashtra, Madhya Pradesh, Chhattisgarh, Odisha, Karnataka and Andhra Pradesh.

**Limestone:** Major limestone producing states in India are Bihar, Jharkhand, Odisha, Madhya Pradesh, Chhattisgarh, Rajasthan, Gujarat and Tamil Nadu.

**Gold:** Kolar in Karnataka has deposits of gold in India. These mines are among the deepest in the world which makes mining of this ore a very expensive process.

**Salt:** It is obtained from seas, lakes and rocks. India is one of the world's leading producers and exporters of salt.

### Uses of Minerals

Minerals are used in many industries. Minerals which are used for gems are usually hard. These are then set in various styles for jewellery. Copper is another metal used in everything from coins to pipes. Silicon, used in the computer industry is obtained from quartz. Aluminum obtained from its ore bauxite is used in automobiles and airplanes, bottling industry, buildings and even in kitchen cookware.

### Conservation of Minerals

Minerals are a non-renewable resource. It takes thousands of years for the formation and concentration

of minerals. The rate of formation is much smaller than the rate at which the humans consume these minerals. It is necessary to reduce wastage in the process of mining. Recycling of metals is another way in which the mineral resources can be conserved.

### Power Resources

#### Conventional Sources

Conventional sources of energy are those which have been in common use for a long time. Firewood and fossil fuels are the two main conventional energy sources.

#### Firewood

It is widely used for cooking and heating. In our country more than fifty per cent of the energy used by villagers comes from fire wood.

Remains of plants and animals which were buried under the earth for millions of years got converted by the heat and pressure into fossil fuels. **Fossil fuel** such as coal, petroleum and natural gas are the main sources of conventional energy. The reserves of these minerals are limited. The rate at which the growing world population is consuming them is far greater than the rate of their formation. So, these are likely to be exhausted soon.

#### Coal

This is the most abundantly found fossil fuel. It is used as a domestic fuel, in industries such as iron and steel, steam engines and to generate electricity. Electricity from coal is called **thermal power**. The coal which we are using today was formed millions of years ago when giant ferns and swamps got buried under the layers of earth. Coal is therefore referred to as **Buried Sunshine**. The leading coal producers of the world are China, USA, Germany, Russia, South Africa and France. The coal producing areas of India are Raniganj, Jharia, Dhanbad and Bokaro in Jharkhand.

#### Petroleum

The word petroleum is derived from Latin words – Petra meaning rock, oleum meaning oil. So, petroleum means rock oil. The petrol that keeps your car running as well as the oil that keeps your cycle from squeaking, both began as a thick black liquid called Petroleum. It is found between the layers of rocks and is drilled from oil fields located in off-shore and coastal areas. This is then sent to refineries which process the crude oil and produce a variety of products like diesel, petrol, kerosene, wax, plastics and lubricants. Petroleum and its derivatives are called **Black Gold** as they are very valuable. The chief petroleum producing countries are Iran, Iraq, Saudi Arabia and Qatar. The other major producers are USA, Russia, Venezuela, and Algeria. The leading producers in India are Digboi in Assam, Bombay High in Mumbai and the deltas of Krishna and Godavari rivers.

#### Natural Gas

Natural gas is found with petroleum deposits and is released when crude oil is brought to the surface. It can be used as a domestic and industrial fuel. Russia, Norway, UK and the Netherlands are the major producers of natural gas.

**Do you know?** Compressed natural gas (CNG) is a popular eco-friendly automobile fuel as it causes less pollution than petroleum and diesel.

In India Jaisalmer, Krishna Godavari delta, Tripura and some areas off shore in Mumbai have natural gas resources. Very few countries in the world have sufficient natural gas reserves of their own.

The sharp increase in our consumption of fossil fuels has led to their depletion at an alarming rate. The toxic pollutants released from burning these fuels are also a cause for concern. Unchecked burning of fossil fuel is

like an unchecked dripping tap which will eventually run dry. This has led to the tapping of various non-conventional sources of energy that are cleaner alternatives to fossil fuels.

### Hydel Power

Rain water or river water stored in dams is made to fall from heights. The falling water flows through pipes inside the dam over turbine blades placed at the bottom of the dam. The moving blades then turn the generator to produce electricity. This is called hydro electricity. The water discharged after the generation of electricity is used for irrigation. One fourth of the world's electricity is produced by hydel power. The leading producers of hydel power in the world are Paraguay, Norway, Brazil, and China. Some important hydel power stations in India are Bhakra Nangal, Gandhi Sagar, Nagarjunsagar and Damodar valley projects.

Do you know? Norway was the first country in the world to develop hydroelectricity.

### Non-conventional Sources of Energy

The increasing use of fossil fuels is leading to its shortage. It is estimated that if the present rate of consumption continues, the reserves of these fuel will get exhausted. Moreover, their use also causes environmental pollution. Therefore, there is need for using non-conventional sources such as solar energy, wind energy, tidal energy which are renewable.

### Solar energy

Sun's heat and light energy can be felt by us every day. Solar energy trapped from the sun can be used in solar cells to produce electricity. Many of these cells are joined into solar panels to generate power for heating and lighting purpose. The technology of utilising solar energy benefits a lot of tropical countries that are blessed with abundant sun shine. Solar energy is also used in solar heaters, solar cookers, solar dryers besides being used for community lighting and traffic signals.

### Wind Energy

Wind is an inexhaustible source of energy. Wind mills have been used for grinding grain and lifting water since times immemorial. In modern time wind mills, the high speed winds rotate the wind mill which is connected to a generator to produce electricity. Wind farms having clusters of such wind mills are located in coastal regions and in mountain passes where strong and steady winds blow. Windfarms are found in Netherlands, Germany, Denmark, UK, USA and Spain are noted for their wind energy production.

### Nuclear Power

Nuclear power is obtained from energy stored in the nuclei of atoms of naturally occurring radio active elements like uranium and thorium. These fuels undergo nuclear fission in nuclear reactors and emit power. The greatest producers of nuclear power are USA and Europe.

In India Rajasthan and Jharkhand have large deposits of Uranium. Thorium is found in large quantities in the Monozite sands of Kerala. The nuclear power stations in India are located in Kalpakkam in Tamilnadu, Tarapur in Maharashtra, Ranapratap Sagar near Kota in Rajasthan, Narora in Uttar Pradesh and Kaiga in Karnataka.

Do you know? The site of the world's first solar and wind powered bus shelter is in Scotland.

### Geothermal Energy

Heat energy obtained from the earth is called **geothermal energy**. The temperature in the interior of the earth rises steadily as we go deeper. Some times this heat energy may surface itself in the form of hot springs. This heat energy can be used to generate power.

Geothermal energy in the form of hot springs has been used for cooking, heating and bathing for several years. USA has the world's largest geothermal power plants followed by New Zealand, Iceland, Philippines and Central America. In India, geothermal plants are located in Manikaran in Himachal Pradesh and Puga Valley in Ladakh.

Do you know? The first tidal energy station was built in France.

### Tidal Energy

Energy generated from tides is called **tidal energy**. Tidal energy can be harnessed by building dams at narrow openings of the sea. During high tide the energy of the tides is used to turn the turbine installed in the dam to produce electricity. Russia, France and the Gulf of Kachchh in India have huge tidal mill farms.

### Biogas

Organic waste such as dead plant and animal material, animal dung and kitchen waste can be converted into a gaseous fuel called biogas. The organic waste is decomposed by bacteria in biogas digesters to emit biogas which is essentially a mixture of methane and carbon dioxide. Biogas is an excellent fuel for cooking and lighting and produces huge amount of organic manure each year.

**Important Terms** **Rock:** A rock is an aggregate of one or more minerals, without a definite composition of constituent minerals. **Ore:** An ore is a rock from which minerals are mined. **Ferrous minerals:** Ferrous minerals are those which contain iron as a constituent. **Non-ferrous minerals:** Non-ferrous minerals are those which do not contain iron as a constituent. **Extraction:** This is a process of excavating minerals from under the earth's surface in order to derive useful minerals from them. **Mining:** This is the process of extracting minerals from rocks present under the earth's surface. **Fossil fuels:** These refer to remains of plants and animals converted into fuels after they remained buried under the surface of the earth for millions of years. **Thermal power:** This refers to electricity obtained from coal. **Coal:** This is a fossil fuel which was formed millions of years ago when giant ferns and swamps got buried under the earth's layers. **Petroleum:** A thick, black liquid fossil fuel which is found between the layers of the rocks and drilled from oil fields. **Solar cell:** These are devices which are used to convert solar energy into electricity.

## Chapter 4 Agriculture

This transformation from a plant to a finished product involves three types of economic activities. These are primary, secondary and tertiary activities. Primary activities include all those connected with extraction and production of natural resources. Agriculture, fishing and gathering are good examples. Secondary activities are concerned with the processing of these resources. Manufacturing of steel, baking of bread and weaving of cloth are examples of this activity. Tertiary activities provide support to the primary and secondary sectors through services. Transport, trade, banking, insurance and advertising are examples of tertiary activities. Agriculture is a primary activity. It includes growing crops, fruits, vegetables, flowers and rearing of livestock. In the world, 50 per cent of persons are engaged in agricultural activity. Two-thirds of India's population is still dependent on agriculture. Favourable topography of soil and climate are vital for agricultural activity. The land on which the crops are grown is known as arable land. In the map you can see that agricultural activity is concentrated in those regions of the world where suitable factors for the growing of



crops exist.



World Distribution of Arable Land

### Do you know ?

**Agriculture:** The science and art of cultivation on the soil, raising crops and rearing livestock. It is also called farming.

**Sericulture:** Commercial rearing of silk worms. It may supplement the income of the farmer.

**Pisciculture:** Breeding of fish in specially constructed tanks and ponds.

**Viticulture:** Cultivation of grapes.

**Horticulture:** Growing vegetables, flowers and fruits for commercial use.

### Farm System

Agriculture or farming can be looked at as a system. The important inputs are seeds, fertilisers, machinery and labour. Some of the operations involved are ploughing, sowing, irrigation, weeding and harvesting. The outputs from the system include crops, wool, dairy and poultry products.

### Types Of Farming

Farming is practised in various ways across the world. Depending upon the geographical conditions, demand of produce, labour and level of technology, farming can be classified into two main types. These are

**subsistence farming** and **commercial farming**.

**Organic Farming:** In this type of farming, organic manure and natural pesticides are used instead of chemicals. No genetic modification is done to increase the yield of the crop.

### Subsistence Farming

This type of farming is practised to meet the needs of the farmer's family. Traditionally, low levels of technology and household labour are used to produce on small output. Subsistence farming can be further classified as intensive subsistence and primitive subsistence farming.

In **intensive subsistence agriculture** the farmer cultivates a small plot of land using simple tools and more labour. Climate with large number of days with sunshine and fertile soils permit growing of more than one crop annually on the same plot. Rice is the main crop. Other crops include wheat, maize, pulses and oilseeds. Intensive subsistence agriculture is prevalent in the thickly populated areas of the monsoon regions of south, southeast and east Asia.

**Primitive subsistence agriculture** includes shifting cultivation and nomadic herding.

**Do you know ?** Shifting cultivation is known by different names in different parts of the world:

*Jhumming in North-East India, Milpa in Mexico, Roca in Brazil, Ladang in Malaysia*

**Shifting cultivation** is practised in the thickly forested areas of Amazon basin, tropical Africa, parts of southeast Asia and Northeast India. These are the areas of heavy rainfall and quick regeneration of vegetation.

A plot of land is cleared by felling the trees and burning them. The ashes are then mixed with the soil and crops like maize, yam, potatoes and cassava are grown. After the soil loses its fertility, the land is abandoned and the cultivator moves to a new plot. Shifting cultivation is also known as 'slash and burn' agriculture.

**Nomadic herding** is practised in the semi-arid and arid regions of Sahara, Central Asia and some parts of India, like Rajasthan and Jammu and Kashmir. In this type of farming, herdsman move from place to place with their animals for fodder and water, along defined routes. This type of movement arises in response to climatic constraints and terrain. Sheep, camel, yak and goats are most commonly reared. They provide milk, meat, wool, hides and other products to the herders and their families.

### Commercial Farming

In commercial farming crops are grown and animals are reared for sale in market. The area cultivated and the amount of capital used is large. Most of the work is done by machines. Commercial farming includes commercial grain farming, mixed farming and plantation agriculture. In commercial grain farming crops are grown for commercial purpose. Wheat and maize are common commercially grown grains. Major areas where commercial grain farming is practised are temperate grasslands of North America, Europe and Asia. These areas are sparsely populated with large farms spreading over hundreds of hectares. Severe winters restrict the growing season and only a single crop can be grown. In **mixed farming** the land is used for growing food and fodder crops and rearing livestock. It is practised in Europe, eastern USA, Argentina, southeast Australia, New Zealand and South Africa.

**Plantations** are a type of commercial farming where single crop of tea, coffee, sugarcane, cashew, rubber, banana or cotton are grown. Large amount of labour and capital are required. The produce may be processed on the farm itself or in nearby factories. The development of a transport network is thus essential for such farming. Major plantations are found in the tropical regions of the world. Rubber in Malaysia, coffee in Brazil, tea in India and Sri Lanka are some examples.

### Major Crops

A large variety of crops are grown to meet the requirement of the growing population. Crops also supply raw materials for agro based industries. Major food crops are wheat, rice, maize and millets. Jute and cotton are fibre crops. Important beverage crops are tea and coffee.

**Rice:** Rice is the major food crop of the world. It is the staple diet of the tropical and sub-tropical regions. Rice needs high temperature, high humidity and rainfall. It grows best in alluvial clayey soil, which can retain water. China leads in the production of rice followed by India, Japan, Sri Lanka and Egypt. In favourable climatic conditions as in West Bengal and Bangladesh two to three crops are grown in a year.

**Wheat:** Wheat requires moderate temperature and rainfall during growing season and bright sunshine at the time of harvest. It thrives best in well drained loamy soil. Wheat is grown extensively in USA, Canada, Argentina, Russia, Ukraine, Australia and India. In India it is grown in winter.

**Millets:** They are also known as coarse grains and can be grown on less fertile and sandy soils. It is a hardy crop that needs low rainfall and high to moderate temperature and adequate rainfall. Jowar, bajra and ragi are grown in India. Other countries are Nigeria, China

and Niger.

**Do you know?** Maize is also known as corn. Various colourful varieties of maize are found across the world.

**Maize:** Maize requires moderate temperature, rainfall and lots of sunshine. It needs well-drained fertile soils. Maize is grown in North America, Brazil, China, Russia, Canada, India, and Mexico.

**Cotton:** Cotton requires high temperature, light rainfall, two hundred and ten frost-free days and bright sunshine for its growth. It grows best on black and alluvial soils. China, USA, India, Pakistan, Brazil and Egypt are the leading producers of cotton. It is one of the main raw materials for the cotton textile industry.

**Jute:** Jute was also known as the 'Golden Fibre'. It grows well on alluvial soil and requires high temperature, heavy rainfall and humid climate. This crop is grown in the tropical areas. India and Bangladesh are the leading producers of jute.

**Coffee:** Coffee requires warm and wet climate and well-drained loamy soil. Hill slopes are more suitable for growth of this crop. Brazil is the leading producer followed by Colombia and India.

**Tea:** Tea is a beverage crop grown on plantations. This requires cool climate and well distributed high rainfall throughout the year for the growth of its tender leaves. It needs well-drained loamy soils and gentle slopes. Labour in large number is required to pick the leaves. Kenya, India, China, Sri Lanka produce the best quality tea in the world.

### Agricultural Development

Agricultural Development refers to efforts made to increase farm production in order to meet the growing demand of increasing population. This can be achieved in many ways such as increasing the cropped area, the number of crops grown, improving irrigation facilities, use of fertilisers and high yielding variety of seeds. Mechanisation of agriculture is also another aspect of agricultural development. The ultimate aim of agricultural development is to increase food security. *Do you know? Food security exists when all people, at all times, have access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.*

Agriculture has developed at different places in different parts of the world. Developing countries with large populations usually practise intensive agriculture where crops are grown on small holdings mostly for subsistence. Larger holdings are more suitable for commercial agriculture as in USA, Canada and Australia. With the help of two case studies of farms — one from India and the other from the USA, let us understand about agriculture in the developing and a developed country.

## Chapter 5 Industries

**Secondary activities** or **manufacturing** change raw materials into products of more value to people. As you have seen pulp was changed into paper and paper into a note book. These represent the two stages of the manufacturing process.

The paper made from pulp and cloth made from cotton have had value added to them at each stage of the manufacturing process. In this way the finished product has more value and utility than the raw material that it is made from.

**Industry** refers to an economic activity that is

concerned with production of goods, extraction of minerals or the provision of services. Thus we have iron and steel industry (production of goods), coal mining industry (extraction of coal) and tourism industry (service provider).

### Classification of Industries

Industries can be classified on the basis of raw materials, size and ownership.

**Raw Materials:** Industries may be agro based, mineral based, marine based and forest based depending on the type of raw materials they use. **Agro based industries** use plant and animal based products as their raw materials. Food processing, vegetable oil, cotton textile, dairy products and leather industries are examples of agro-based industries. **Mineral based industries** are primary industries that use mineral ores as their raw materials. The products of these industries feed other industries. Iron made from iron ore is the product of mineral based industry. This is used as raw material for the manufacture of a number of other products, such as heavy machinery, building materials and railway coaches. **Marine based industries** use products from the sea and oceans as raw materials. Industries processing sea food or manufacturing fish oil are some examples. **Forest based industries** utilise forest produce as raw materials. The industries associated with forests are pulp and paper, pharmaceuticals, furniture and buildings.

**Size:** It refers to the amount of capital invested, number of people employed and the volume of production. Based on size, industries can be classified into **small scale** and **large scale industries**. Cottage or household industries are a type of small scale industry where the products are manufactured by hand, by the artisans. Basket weaving, pottery and other handicrafts are examples of cottage industry. Small scale industries use lesser amount of capital and technology as compared to large scale industries that produce large volumes of products. Investment of capital is higher and the technology used is superior in large scale industries. Silk weaving and food processing industries are small scale industries. Production of automobiles and heavy machinery are large scale industries.

**Ownership:** Industries can be classified into private sector, state owned or public sector, joint sector and cooperative sector. **Private sector industries** are owned and operated by individuals or a group of individuals. The public sector industries are owned and operated by the government, such as Hindustan Aeronautics Limited and Steel Authority of India Limited. **Joint sector industries** are owned and operated by the state and individuals or a group of individuals. Maruti Udyog Limited is an example of joint sector industry. **Co-operative sector** industries are owned and operated by the producers or suppliers of raw materials, workers or both. Anand Milk Union Limited and Sudha Dairy are a success stories of a co-operative venture.

### Factors Affecting Location of Industries

The factors affecting the location of industries are the availability of raw material, land, water, labour, power, capital, transport and market. Industries are situated where some or all of these factors are easily available. Sometimes, the government provides incentives like subsidised power, lower transport cost and other infrastructure so that industries may be located in backward areas. Industrialisation often leads to development and growth of towns and cities.

### Industrial System



An industrial system consists of inputs, processes and outputs. The inputs are the raw materials, labour and costs of land, transport, power and other infrastructure. The processes include a wide range of activities that convert the raw material into finished products. The outputs are the end product and the income earned from it. In case of the textile industry the inputs may be cotton, human labour, factory and transport cost. The processes include ginning, spinning, weaving, dyeing and printing. The output is the shirt you wear.

### Industrial Regions

Industrial regions emerge when a number of industries locate close to each other and share the benefits of their closeness. Major industrial regions of the world are eastern North America, western and central Europe, eastern Europe and eastern Asia. Major industrial regions tend to be located in the temperate areas, near sea ports and especially near coal fields.

India has several industrial regions like Mumbai-Pune cluster, Bangalore-Tamil Nadu region, Hugli region, Ahmedabad-Baroda region, Chottanagpur industrial belt, Vishakhapatnam-Guntur belt, Gurgaon-Delhi-

Meerut region and the Kollam-Thiruvananthapuram industrial cluster.

### Industrial Disaster

In industries, accidents/disasters mainly occur due to technical failure or irresponsible handling of hazardous material.

One of the worst industrial disasters of all time occurred in Bhopal on 3 December 1984 around 00:30 a.m. It was a technological accident in which highly poisonous Methyl Isocyanate (MIC) gas along with Hydrogen Cyanide and other reaction products leaked out of the pesticide factory of Union Carbide. The official death toll was 3,598 in 1989. Thousands, who survived still suffer from one or many ailments like blindness, impaired immune system, gastrointestinal disorders etc. In another incident, on 23 December 2005, due to gas well blowout in Gao Qiao, Chongqing, China, 243 people died, 9,000 were injured and 64,000 were evacuated. Many people died because they were unable to run after the explosion. Those who could not escape in time suffered burns to their eyes, skin and lungs from the gas.

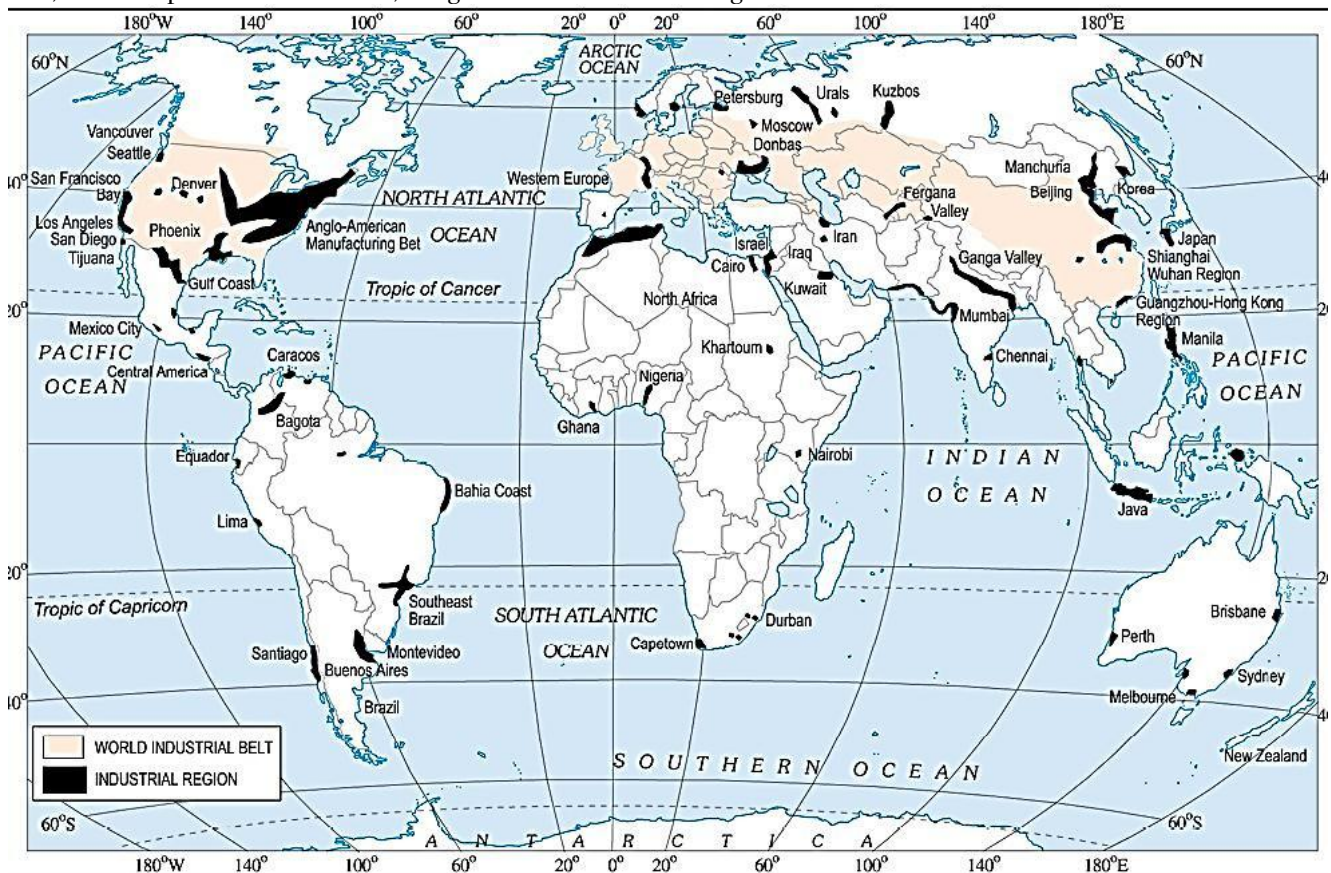


Fig 5.4: World's Industrial Regions

### Risk Reduction Measures

1. Densely populated residential areas should be separated far away from the industrial areas.
2. People staying in the vicinity of industries should be aware of the storage of toxins or hazardous substances and their possible effects in case if an accident occurs.
3. Fire warning and fighting system should be improved.
4. Storage capacity of toxic substances should be limited.
5. Pollution dispersion qualities in the industries should be improved.

Do you know? Emerging industries are also known as 'Sunrise Industries'. These include Information technology, Wellness, Hospitality and Knowledge.

### Distribution Of Major Industries

The world's major industries are the iron and steel industry, the textile industry and the information

technology industry. The iron and steel and textile industry are the older industries while information technology is an emerging industry.

The countries in which iron and steel industry is located are Germany, USA, China, Japan and Russia. Textile industry is concentrated in India, Hong Kong, South Korea, Japan and Taiwan. The major hubs of Information technology industry are the Silicon valley of Central California and the Bangalore region of India.

### Smelting

It is the process in which metals are extracted from their ores by heating beyond the melting point

### Iron and Steel Industry

Like other industries iron and steel industry too comprises various inputs, processes and outputs. This is a feeder industry whose products are used as raw



material for other industries.

The inputs for the industry include raw materials such as iron ore, coal and limestone, along with labour, capital, site and other infrastructure. The process of converting iron ore into steel involves many stages. The raw material is put in the blast furnace where it undergoes smelting. It is then refined. The output obtained is steel which may be used by other industries as raw material.

Steel is tough and it can easily be shaped, cut, or made into wire. Special alloys of steel can be made by adding small amounts of other metals such as aluminium, nickel, and copper. Alloys give steel unusual hardness, toughness, or ability to resist rust.

Before 1800 A.D. iron and steel industry was located where raw materials, power supply and running water were easily available. Later the ideal location for the industry was near coal fields and close to canals and railways. After 1950, iron and steel industry began to be located on large areas of flat land near sea ports. This is because by this time steel works had become very large and iron ore had to be imported from overseas.

In India, iron and steel industry has developed taking advantage of raw materials, cheap labour, transport and market. All the important steel producing centres such as Bhilai, Durgapur, Burnpur, Jamshedpur, Rourkela, Bokaro are situated in a region that spreads over four states — West Bengal, Jharkhand, Odisha and Chhattisgarh. Bhadravati and Vijay Nagar in Karnataka, Vishakhapatnam in Andhra Pradesh, Salem in Tamil Nadu are other important steel centres utilising local resources.

**Jamshedpur:** Before 1947, there was only one iron and steel plant in the country — Tata Iron and Steel Company Limited (TISCO). It was privately owned. After Independence, the government took the initiative and set up several iron and steel plants. TISCO was started in 1907 at Sakchi, near the confluence of the rivers Subarnarekha and Kharkai in Jharkhand. Later on Sakchi was renamed as Jamshedpur. Geographically, Jamshedpur is the most conveniently situated iron and steel centre in the country.

Sakchi was chosen to set up the steel plant for several reasons. This place was only 32 km away from Kalimati station on the Bengal-Nagpur railway line. It was close to the iron ore, coal and manganese deposits as well as to Kolkata, which provided a large market. TISCO, gets coal from Jharia coalfields, and iron ore, limestone, dolomite and manganese from Odisha and Chhattisgarh. The Kharkai and Subarnarekha rivers ensured sufficient water supply. Government initiatives provided adequate capital for its later development.

In Jamshedpur, several other industrial plants were set up after TISCO. They produce chemicals, locomotive parts, agricultural equipment, machinery, tinplate, cable and wire.

The development of the iron and steel industry opened the doors to rapid industrial development in India. Almost all sectors of the Indian industry depend heavily on the iron and steel industry for their basic infrastructure. The Indian iron and steel industry consists of large integrated steel plants as well as mini steel mills. It also includes secondary producers, rolling mills and ancillary industries.

**Pittsburgh:** It is an important steel city of the United States of America. The steel industry at Pittsburgh enjoys locational advantages. Some of the raw material such as coal is available locally, while the iron ore comes from the iron mines at Minnesota, about 1500 km from

Pittsburgh. Between these mines and Pittsburgh is one of the world's best routes for shipping ore cheaply — the famous Great Lakes waterway. Trains carry the ore from the Great Lakes to the Pittsburgh area. The Ohio, the Monogahela and Allegheny rivers provide adequate water supply.

**Do you know?** The names of Great Lakes are Superior, Huron, Ontario, Michigan and Erie. Lake Superior is the largest of these five lakes. It lies higher upstream than others. Today, very few of the large steel mills are in Pittsburgh itself. They are located in the valleys of the Monogahela and Allegheny rivers above Pittsburgh and along the Ohio River below it. Finished steel is transported to the market by both land and water routes.

The Pittsburgh area has many factories other than steel mills. These use steel as their raw material to make many different products such as railroad equipment, heavy machinery and rails.

### Cotton Textile Industry

Weaving cloth from yarn is an ancient art. Cotton, wool, silk, jute, flax have been used for making cloth. The textile industry can be divided on the basis of raw materials used in them. Fibres are the raw material of textile industry. Fibres can be natural or man-made. Natural fibres are obtained from wool, silk, cotton, linen and jute. Man made fibres include nylon, polyester, acrylic and rayon.

The cotton textile industry is one of the oldest industries in the world. Till the industrial revolution in the 18th century, cotton cloth was made using hand spinning techniques (wheels) and looms. In 18th century power looms facilitated the development of cotton textile industry, first in Britain and later in other parts of the world. Today India, China, Japan and the USA are important producers of cotton textiles.

India has a glorious tradition of producing excellent quality cotton textiles. Before the British rule, Indian hand spun and hand woven cloth already had a wide market. The **Muslins** of Dhaka, **Chintzes** of Masulipatnam, **Calicos** of Calicut and Gold-wrought cotton of Burhanpur, Surat and Vadodara were known worldwide for their quality and design. But the production of hand woven cotton textile was expensive and time consuming. Hence, traditional cotton textile industry could not face the competition from the new textile mills of the West, which produced cheap and good quality fabrics through mechanized industrial units.

**Do you know?** The first textile mill in the country was established at Fort Gloster near Kolkata in 1818 but it closed down after some time.

The first successful mechanized textile mill was established in Mumbai in 1854. The warm, moist climate, a port for importing machinery, availability of raw material and skilled labour resulted in rapid expansion of the industry in the region.

Initially this industry flourished in the states of Maharashtra and Gujarat because of favourable humid climate. But today, humidity can be created artificially, and raw cotton is a pure and not weight losing raw material, so this industry has spread to other parts of India. Coimbatore, Kanpur, Chennai, Ahmedabad, Mumbai, Kolkata, Ludhiana, Pudukcherry and Panipat are some of the other important centres.

**Do you know?** About one-third of the Indian textile industry's total production is exported.

**Ahmedabad:** It is located in Gujarat on the banks of the Sabarmati river. The first mill was established in 1859. It soon became the second largest textile city of India, after Mumbai. Ahmedabad was therefore often referred

to as the 'Manchester of India'. Favourable locational factors were responsible for the development of the textile industry in Ahmedabad. Ahmedabad is situated very close to cotton growing area. This ensures easy availability of raw material. The climate is ideal for spinning and weaving. The flat terrain and easy availability of land is suitable for the establishment of the mills. The densely populated states of Gujarat and Maharashtra provide both skilled and semi-skilled labour. Well developed road and railway network permits easy transportation of textiles to different parts of the country, thus providing easy access to the market. Mumbai port nearby facilitates import of machinery and export of cotton textiles. But in the recent years, Ahmedabad textile mills have been having some problems. Several textile mills have closed down. This is primarily due to the emergence of new textile centres in the country as well as non-upgradation of machines and technology in the mills of Ahmedabad.

**Osaka:** It is an important textile centre of Japan, also known as the 'Manchester of Japan'. The textile industry developed in Osaka due to several geographical factors. The extensive plain around Osaka ensured that land was easily available for the growth of cotton mills. Warm humid climate is well suited to spinning and weaving. The river Yodo provides sufficient water for the mills. Labour is easily available. Location of port facilitates import of raw cotton and for exporting textiles. The textile industry at Osaka depends completely upon imported raw materials. Cotton is imported from Egypt, India, China and USA. The finished product is mostly exported and has a good market due to good quality and low price. Though it is one of the important textile cities in the country, of late, the cotton textile industry of Osaka has been replaced by other industries, such as iron and steel, machinery, shipbuilding, automobiles, electrical equipment and cement.

### Information Technology (IT)

Imagine how much could be accomplished if companies could operate on a twenty-four hour workday. Some software companies in the United States of America and in Bengaluru, India have joined hands to achieve this. There are many ways in which this form of shift work across oceans. For example, two software professionals, Danny in Silicon Valley, California and Smitha in Bengaluru are working on a joint project. While Smitha in Bengaluru sleeps, Danny in California is working. At the end of his workday, he sends a message to Smitha, updating his progress. When she arrives at work in Bengaluru, a couple of hours later, she notices that a message awaits her. She gets to work on the project straight away. By the end of her workday she relays the results of her efforts back to California. By the way they communicate and work together, it is as if they were sitting in adjoining offices.

The **information technology** industry deals in the storage, processing and distribution of information. Today, this industry has become global. This is due to a series of technological, political, and socio-economic events. The main factors guiding the location of these industries are resource availability, cost and infrastructure. The major hubs of the IT industry are the Silicon Valley, California and Bengaluru, India. Bengaluru is located on the Deccan Plateau from where it gets the name 'Silicon Plateau'. The city is known for its mild climate throughout the year. Silicon Valley, is a part of Santa Clara Valley, located next to the Rocky Mountains of North America. The area has temperate climate with the temperatures rarely dropping below 0

degrees centigrade. The locational advantages of the Silicon plateau, Bengaluru and Silicon Valley, California are discussed on the next page. You may notice the similarities between the two cities.

There are other emerging information technology hubs in metropolitan centres of India such as Mumbai, New Delhi, Hyderabad and Chennai. Other cities such as Gurgaon, Pune, Thiruvananthapuram, Kochi and Chandigarh are also important centres of the IT industry. However, Bengaluru has always had a unique advantage, as a city with highest availability of middle and top management talent.

**Do you know?** Why do high technology industries group together?

- They can be located near main road/highways for easy access.
- Firms can benefit from exchange of knowledge.
- Services and facilities such as roads, car parks and waste disposal can be organised efficiently.

**Important Terms Manufacturing:** This refers to changing the raw materials into a usable form, which proves to be more valuable for people. **Agro-based industries:** These industries use plant and animal products as raw material. **Mineral-based industries:** These industries use mineral ores as raw material. **Marine-based industries:** These industries use sea and ocean products as raw material. **Forest-based industries:** These industries use forest products as raw material. **Small scale industries:** These industries operate on less capital and infrastructure. **Large scale industries:** These industries operate on large capital and big infrastructure. **Private sector industries:** These industries are owned and run by a person or a group of persons. **Public sector industries:** These industries are owned and run by the government. **Joint sector industries:** These industries are owned and run by both, the people as well as the state. **Cooperative sector industries:** These industries are owned and run by producers or suppliers of raw material. **Steel:** This is an alloy of iron obtained from iron ore. **Refining:** This is the process of deriving the highest possible purity of metal which is obtained from some mineral. **Smelting:** This is the process of extracting minerals from their ores by heating them above the melting point.

## Chapter 6 Human Resources

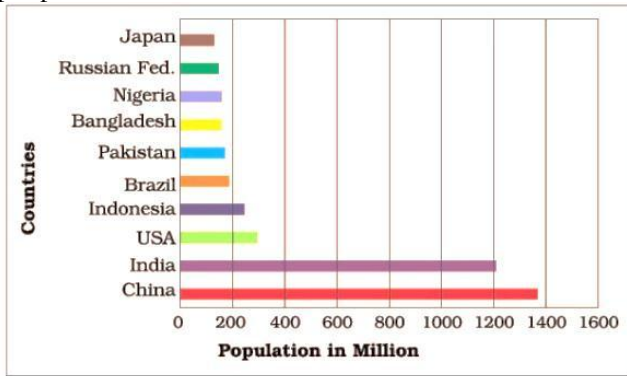
People are a nation's greatest resource. Nature's bounty becomes significant only when people find it useful. It is people with their demands and abilities that turn them into 'resources'. Hence, **human resource** is the ultimate resource. Healthy, educated and motivated people develop resources as per their requirements. Human resources like other resources are not equally distributed over the world. They differ in their educational levels, age and sex. Their numbers and characteristics also keep changing.

### Distribution of Population

The way in which people are spread across the earth surface is known as **the pattern of population distribution**. More than 90 per cent of the world's population lives in about 30 per cent of the land surface. The distribution of population in the world is extremely uneven.

Some areas are very crowded and some are sparsely populated. The crowded areas are south and south east Asia, Europe and north eastern North America. Very few people live in high latitude areas, tropical deserts, high mountains and areas of equatorial forests. Many more people live north of the Equator than south of the Equator. Almost three-quarters of the world's people live in two continents Asia and Africa. Sixty per cent of the world's people stay in just 10 countries. All of them have more than a 100 million

people.



### World's most populous countries

**Do you know?** Average density of population in India is 382 persons per square km.

### Density of Population

Population density is the number of people living in a unit area of the earth's surface. It is normally expressed as per square km. The average density of population in the whole world is 51 persons per square km. South Central Asia has the highest density of population followed by East and South East Asia.

### FACTORS AFFECTING DISTRIBUTION OF POPULATION

#### Geographical Factors

**Topography:** People always prefer to live on plains rather than mountains and plateaus because these areas are suitable for farming, manufacturing and service activities. The Ganga plains are the most densely populated areas of the world while mountains like Andes, Alps and Himalayas are sparsely populated.

**Climate:** People usually avoid extreme climates that are very hot or very cold like Sahara desert, polar regions of Russia, Canada and Antarctica.

**Soil:** Fertile soils provide suitable land for agriculture. Fertile plains such as Ganga and Brahmaputra in India, Hwang-He, Chang Jiang in China and the Nile in Egypt are densely populated.

**Water:** People prefer to live in the areas where fresh water is easily available. The river valleys of the world are densely populated while deserts have sparse population.

**Minerals:** Areas with mineral deposits are more populated. Diamond mines of South Africa and discovery of oil in the Middle east lead to settling of people in these areas.

#### Social, Cultural and Economic Factors

**Social:** Areas of better housing, education and health facilities are more densely populated e.g., Pune.

**Cultural:** Places with religion or cultural significance attract people. Varanasi, Jerusalem and Vatican city are some examples.

**Economic:** Industrial areas provide employment opportunities. Large number of people are attracted to these areas. Osaka in Japan and Mumbai in India are two densely populated areas.

### POPULATION CHANGE

The population change refers to change in the number of people during a specific time. The world population has not been stable. It has increased manifold as seen in the Fig 6.3. Why? This is actually due to changes in the number of births and deaths. For an extremely long period of human history, until the 1800s, the world's population grew steadily but slowly. Large numbers of babies were born, but they died early too. This was as there were no proper health facilities. Sufficient food was not available for all the people. Farmers were not

able to produce enough to meet the food requirements of all the people. As a result the total increase in population was very low.

In 1804, the world's population reached one billion. A hundred and fifty five years later, in 1959, the world's population reached 3 billion. This is often called population explosion. In 1999, 40 years later, the population doubled to 6 billion. The main reason for this growth was that with better food supplies and medicine, deaths were reducing, while the number of births still remained fairly high.

Births are usually measured using the **birth rate** i.e. the number of live births per 1,000 people. Deaths are usually measured using the **death rate** i.e. the number of deaths per 1,000 people. **Migrations** is the movement of people in and out of an area.

Births and deaths are the natural causes of population change. The difference between the birth rate and the death rate of a country is called the **natural growth rate**.

The population increase in the world is mainly due to rapid increase in natural growth rate.

Migration is another way by which population size changes. People may move within a country or between countries. **Emigrants** are people who leave a country; **Immigrants** are those who arrive in a country.

Countries like the United States of America and Australia have gained in-numbers by **in-migration** or **immigration**. Sudan is an example of a country that has experienced a loss in population numbers due to **out-migration** or **emigration**.

The general trend of international migrations is from the less developed nations to the more developed nations in search of better employment opportunities. Within countries large number of people may move from the rural to urban areas in search of employment, education and health facilities.

### Patterns of Population Change

Rates of population growth vary across the world.

Although, the world's total population is rising rapidly, not all countries are experiencing this growth.

Some countries like Kenya have high population growth rates. They had both high birth rates and death rates. Now, with improving health care, death rates have fallen, but birth rates still remain high leading to high growth rates.

In other countries like United Kingdom, population growth is slowing because of both low death and low birth rates.

### Population Composition

How crowded a country is, has little to do with its level of economic development. For example, both Bangladesh and Japan are very densely populated but Japan is far more economically developed than Bangladesh.

To understand the role of people as a resource, we need to know more about their qualities. People vary greatly in their age, sex, literacy level, health condition, occupation and income level. It is essential to understand

these characteristics of the people. Population composition refers to the structure of the population. The composition of population helps us to know how many are males or females, which age group they belong to, how educated they are and what type of occupations they are employed in, what their income levels and health conditions are.

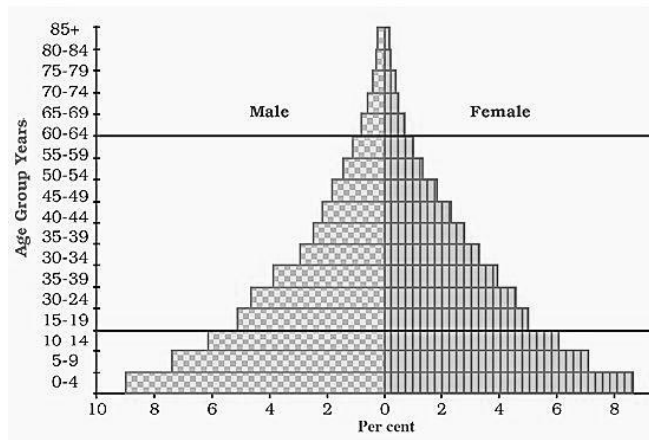
An interesting way of studying the population composition of a country is by looking at the population



pyramid, also called an age-sex pyramid.

### A population pyramid shows

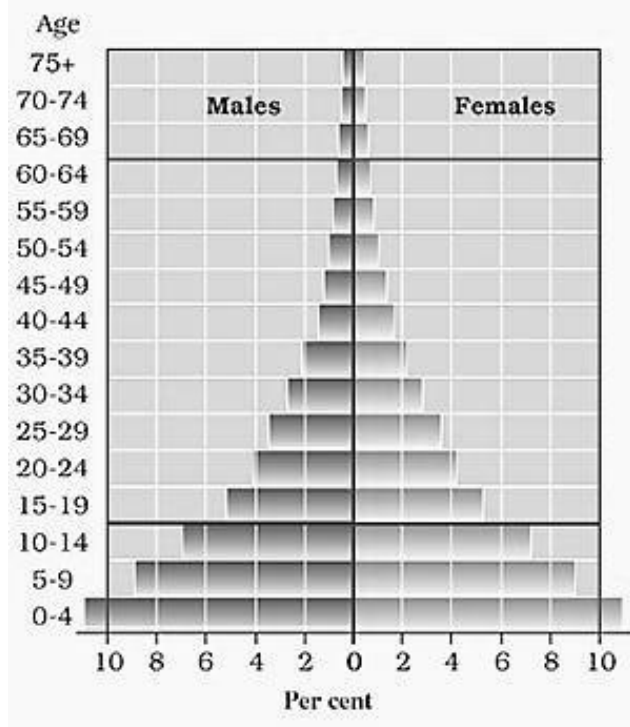
- The total population divided into various age groups, e.g., 5 to 9 years, 10 to 14 years.
- The percentage of the total population, subdivided into males and females, in each of those groups.



### Population Pyramid

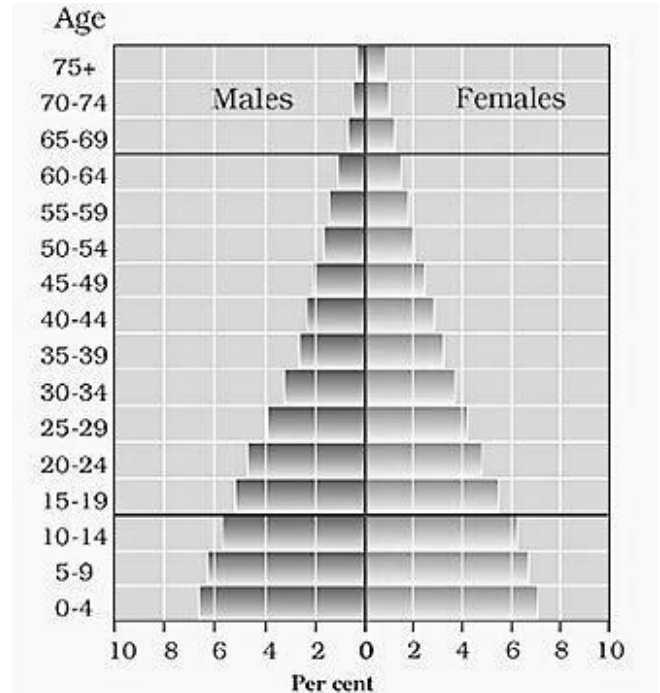
The shape of the population pyramid tells the story of the people living in that particular country. The numbers of children (below 15 years) are shown at the bottom and reflect the level of births. The size of the top shows the numbers of aged people (above 65 years) and reflects the number of deaths.

The population pyramid also tells us how many dependents there are in a country. There are two groups of dependents — young dependents (aged below 15 years) and elderly dependents (aged over 65 years). Those of the working age are the economically active. The population pyramid of a country in which birth and death rates both are high is broad at the base and rapidly narrows towards the top. This is because although many children are born, a large percentage of them die in their infancy, relatively few become adults and there are very few old people. This situation is typified by the pyramid shown for Kenya.



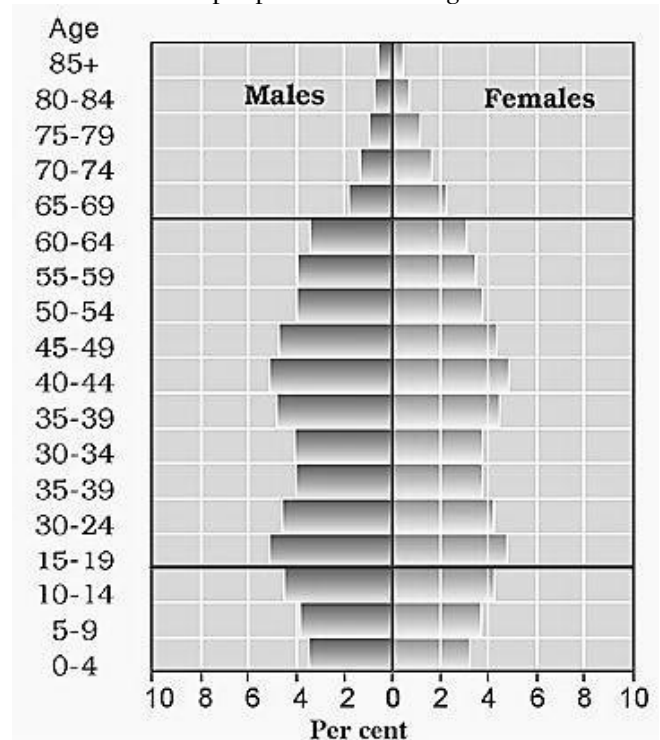
Population Pyramid of Kenya

In countries where death rates (especially amongst the very young) are decreasing, the pyramid is broad in the younger age groups, because more infants survive to adulthood. This can be seen in the pyramid for India. Such populations contain a relatively large number of young people and which means a strong and expanding labour force.



### Population Pyramid of India

In countries like Japan, low birth rates make the pyramid narrow at the base. Decreased death rates allow numbers of people to reach old age.



### Population Pyramid of Japan

Skilled, spirited and hopeful young people endowed with a positive outlook are the future of any nation. We in India are fortunate to have such a resource. They must be educated and provided skills and opportunities to become able and productive.

**Important Terms Migration:** This refers to the movement of people from one region to another. **Birth rate:** This refers to the number of live births per 1000 people. **Death rate:** This

refers to the number of deaths per 1000 people. **Natural death rate:** This is the difference between the birth rate and death rate. **Life expectancy:** This refers to the expected number of years which an average individual can expect to

live. It is calculated on the basis of the existing data for a particular region.

# NCERT Class 9

## Geography (Contemporary India 1)

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 India – Size And Location

#### Chapter Summary Topicwise

##### Topic-1 Location

- India is considered as one of the ancient civilizations in the world.
- India has achieved multifaceted socioeconomic progress in the field of agriculture, industry, technology and overall economic development.
- India is a country lying in the Northern Hemisphere.
- The mainland extends between latitudes 8°4'N and 37°6'N and longitudes 68°7'E and 97°25'E.
- The Tropic of Cancer (23°30'N) passes through the centre of India and divides the country into almost two equal halves.
- The North-South extent of India is approximately 3,200 km.
- The East-West extent of the country is 2,933 km approximately.
- Indira Point is the southernmost point of the Indian Union.

**Important Terms Indira Point:** Southern-most point of India's territory. **Equator:** An imaginary line drawn around the middle of the earth that divides it into two equal halves.

**Latitude:** The angular distance from the equator of a point

##### Topic-2 Size

- The total area of Indian landmass is 3.28 million square km.
- India's total area accounts for about 2.4 per cent of the total geographical area of the world.
- India is the seventh largest country of the world.
- India has a land boundary of about 15,200 km and the total length of the coast line of the mainland including the Andaman and Nicobar and the Lakshadweep is 7,516.6 km.
- The Northwest, North and Northeast boundaries of India are characterized by the young fold mountains.
- The latitudinal and longitudinal extent of the mainland is about 30°.
- Time along the Standard Meridian of India (82°30'E) passing through Mirzapur in Uttar Pradesh is taken as the standard time for the whole country.

**Important Terms Indian Standard Time:** The time which is applicable all over India is called Indian Standard Time. The Standard Meridian of India is 82°30'E longitude, passing through Mirzapur in Uttar Pradesh. It is five and half hours ahead of GMT.

##### Topic-3 India and the World

- Location of India in the world plays an important role because of the following reasons:
- The Indian landmass has a central location between the East and West Asia.
- India is a Southward extension of the Asian continent.
- The Trans-Indian Ocean routes connecting the countries of Europe in the West and the countries of

East Asia provide a strategic central location to India.

- The Deccan Peninsula protrudes into the Indian Ocean which helps it to establish close contact with West Asia, Africa and Europe from the West coast and with Southeast and East Asia from the East coast.
- No other country has such a long coastline on the Indian Ocean as India has, and indeed, it is India's eminent position in the Indian Ocean which justifies the naming of an ocean after it.
- Distance between India and Europe has been reduced by 7,000 km after the opening of the Suez Canal in 1869.
- India is connected with Europe, North America and South America with the Suez Canal and the Cape of Good Hope through the sea routes.

**Important Terms Tropic of Cancer:** This is the parallel of latitude that runs approximately 23°30'N of the Equator.

**Peninsular Plateau:** It is a tableland composed of the old crystalline, igneous and metamorphic rocks.

##### Topic-4 India's Neighbours

- India has 29 states and 7 Union Territories.
- India shares its land boundaries with Pakistan and Afghanistan in the Northwest, China (Tibet), Nepal and Bhutan in the North and Myanmar and Bangladesh in the East.
- Our southern neighbours across the sea consist of the two island countries, namely, Sri Lanka and Maldives.
- India has had strong geographical and historical links with its neighbours.

**Important Terms Provinces:** States ruled directly by British officials who were appointed by the Viceroy. **Princely States:** States ruled by local, hereditary rulers, who acknowledged sovereignty in return for local autonomy.

- **Longitude:** The angular distance on the earth's surface, measured East or West from the Prime Meridian at Greenwich, England, to the meridian passing through a position, expressed in degrees (or hours), minutes, and seconds.

India is one of the ancient civilisations in the world. It has achieved multi-faceted socio-economic progress during the last five decades. It has moved forward displaying remarkable progress in the field of agriculture, industry, technology and overall economic development. India has also contributed significantly to the making of world history.

##### LOCATION

India is a vast country. Lying entirely in the Northern hemisphere () the main land extends between latitudes 8°4'N and 37°6'N and longitudes 68°7'E and 97°25'E. The Tropic of Cancer (23° 30'N) divides the country into almost two equal parts. To the southeast and southwest of the mainland, lie the Andaman and Nicobar islands and the Lakshadweep islands in Bay of Bengal and Arabian Sea respectively. Find out the extent of these groups of islands from your atlas.

**Do you know?** The southernmost point of the Indian Union – 'Indira Point' got submerged under the sea water in 2004 during the Tsunami.

##### SIZE



The land mass of India has an area of 3.28 million square km. India's total area accounts for about 2.4 per cent of the total geographical area of the world. From the it is clear that India is the seventh largest country of the world. India has a land boundary of about 15,200 km and the total length of the coast line of the mainland including Andaman and Nicobar and Lakshadweep is 7,516.6 km.

India is bounded by the young fold mountains in the northwest, north and north east. South of about 22° north latitude, it begins to taper, and extends towards the Indian Ocean, dividing it into two seas, the Arabian Sea on the west and the Bay of Bengal on its east. From Gujarat to Arunachal Pradesh there is a time lag of two hours. Hence, time along the Standard Meridian of India (82°30'E) passing through Mirzapur (in Uttar Pradesh) is taken as the standard time for the whole country. The latitudinal extent influences the duration of the day and night, as one moves from south to north

### Find Out

Why 82°30'E has been selected as the Standard Meridian of India?

Why is the difference between the durations of day and night hardly felt at Kanniyakumari but not so in Kashmir?

### INDIA AND THE WORLD

The Indian landmass has a central location between the East and the West Asia. India is a southward extension of the Asian Continent. The trans Indian Ocean routes which connect the countries of Europe in the West and the countries of East Asia provide a strategic central location to India. Note that the Deccan Peninsula protrudes into the Indian Ocean, thus helping India to establish close contact with West Asia, Africa and Europe from the western coast and with Southeast and East Asia from the eastern coast. No other country has a long coastline on the Indian Ocean as India has and indeed, it is India's eminent position in the Indian Ocean which justifies the naming of an Ocean after it. India's contacts with the World have continued through the ages but her relationships through the land routes are much older than her maritime contacts. The various passes across the mountains in the north have provided passages to the ancient travellers, while the oceans restricted such interaction for a long time.

**Do you know?** Since the opening of the Suez Canal in 1869, India's distance from Europe has been reduced by 7,000 km.

These routes have contributed in the exchange of ideas and commodities since ancient times. The ideas of the Upanishads and the Ramayana, the stories of Panchtantra, the Indian numerals and the decimal system thus could reach many parts of the world. The spices, muslin and other merchandise were taken from India to different countries. On the other hand, the influence of Greek sculpture, and the architectural styles of dome and minarets from West Asia can be seen in different parts of our country.

### India's Neighbours

India occupies an important strategic position in South Asia. India has 28 states and 7 Union Territories.

**Find Out** The number of Union Territories along the western and eastern coasts. Area-wise which is the smallest and which is the largest state?

The states which do not have an international border or lie on the coast

Classify the states into four groups each having common frontiers with (i) Pakistan, (ii) China, (iii) Myanmar, (iv)

### Bangladesh

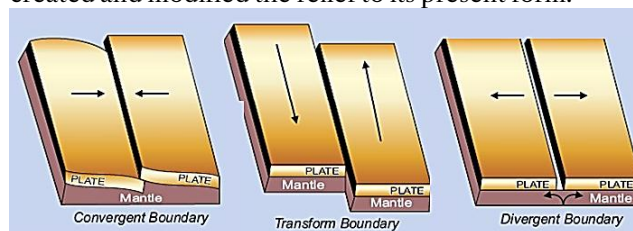
India shares its land boundaries with Pakistan and Afghanistan in the northwest, China (Tibet), Nepal and Bhutan in the north and Myanmar and Bangladesh in the east. Our southern neighbours across the sea consist of the two island countries, namely Sri Lanka and Maldives. Sri Lanka is separated from India by a narrow channel of sea formed by the Palk Strait and the Gulf of Mannar while Maldives Islands are situated to the south of the Lakshadweep Islands.

India has had strong geographical and historical links with her neighbours. Look at the physical map of Asia in your atlas, and note how India stands apart from the rest of Asia.

**Do you know?** Before 1947, there were two types of states in India – the provinces and the Princely states. Provinces were ruled directly by British officials who were appointed by the Viceroy. Princely states were ruled by local, hereditary rulers, who acknowledged sovereignty in return for local autonomy.

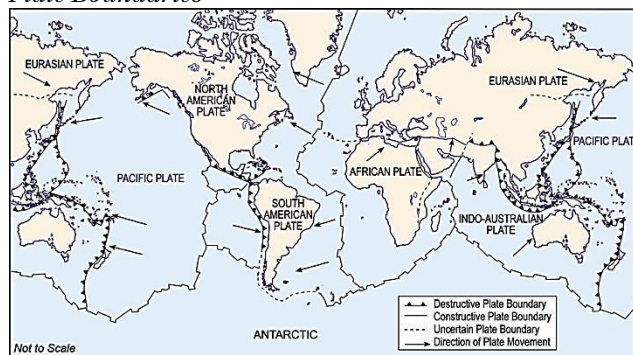
## Chapter 2 Physical Features Of India

India is a large landmass formed during different geological periods which has influenced her relief. Besides geological formations, a number of processes such as weathering, erosion and deposition have created and modified the relief to its present form.



Earth scientists have attempted to explain the formation of physical features with the help of some theories based on certain evidences. One such plausible theory is the "Theory of Plate Tectonics". According to this theory, the crust (upper part) of the earth has been formed out of seven major and some minor plates.

### Plate Boundaries



The movement of the plates results in the building up of stresses within the plates and the continental rocks above, leading to **folding**, **faulting** and **volcanic activity**. Broadly, these plate movements are classified into three types. While some plates come towards each other and form convergent boundary. Some plates move away from each other and form divergent boundary. In the event of two plates coming together they may either collide and crumble, or one may slide under the other. At times, they may also move horizontally past each other and form transform boundary. The movement of these plates have changed the position and size of the continents over millions of years. Such movements have also influenced the

evolution of the present landform features of India.

**Do you know?** Most volcanoes and earthquakes in the world are located at plate margins, but some do occur within the plates.

The oldest landmass, (the Peninsula part), was a part of the Gondwana land. The Gondwana land included India, Australia, South Africa, South America and Antarctica as one single land mass. The convectional currents split the crust into a number of pieces, thus leading to the drifting of the Indo-Australian plate after being separated from the Gondwana land, towards north. The northward drift resulted in the collision of the plate with the much larger Eurasian Plate. Due to this collision, the sedimentary rocks which were accumulated in the geosyncline known as the Tethys were folded to form the mountain system of western Asia and Himalaya. **Gondwana land:** It is the southern part of the ancient super continent Pangea with Angara Land in the northern part. The Himalayan uplift out of the Tethys sea and subsidence of the northern flank of the peninsular plateau resulted in the formation of a large basin. In due course of time this depression, gradually got filled with deposition of sediments by the rivers flowing from the mountains in the north and the peninsular plateau in the south. A flat land of extensive alluvial deposits led to the formation of the northern plains of India.

The land of India displays great physical variation. Geologically, the Peninsular Plateau constitutes one of the ancient landmasses on the earth's surface. It was supposed to be one of the most stable land blocks. The Himalayas and the Northern Plains are the most recent landforms. From the view point of geology, Himalayan mountains form an unstable zone. The whole mountain system of Himalaya represents a very youthful topography with high peaks, deep valleys and fast flowing rivers. The northern plains are formed of alluvial deposits. The peninsular plateau is composed of igneous and metamorphic rocks with gently rising hills and wide valleys.

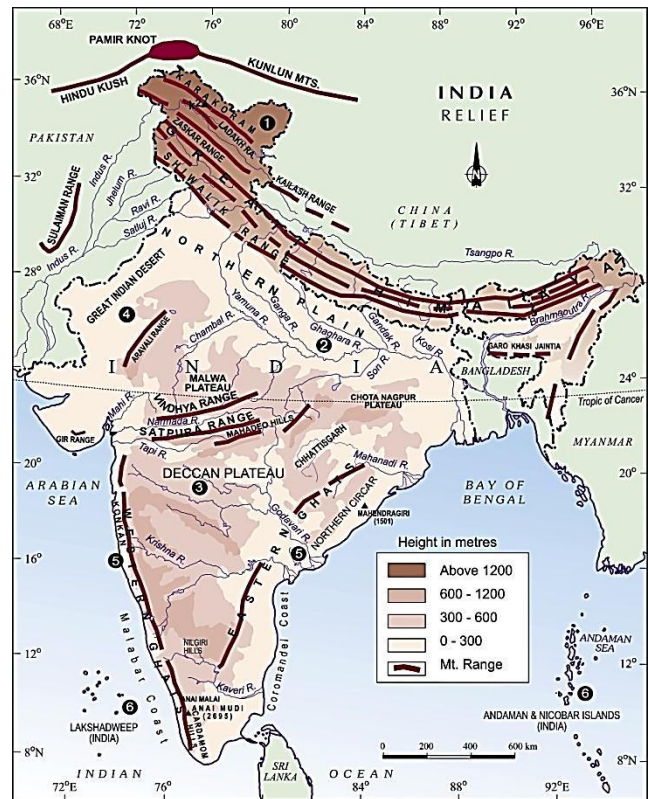
### MAJOR PHYSIOGRAPHIC DIVISIONS

The physical features of India can be grouped under the following physiographic divisions ():

- (1) The Himalayan Mountains
- (2) The Northern Plains
- (3) The Peninsular Plateau
- (4) The Indian Desert
- (5) The Coastal Plains
- (6) The Islands

#### The Himalayan Mountains

The Himalayas, geologically young and structurally fold mountains stretch over the northern borders of India. These mountain ranges run in a west-east direction from the Indus to the Brahmaputra. The Himalayas represent the loftiest and one of the most rugged mountain barriers of the world. They form an arc, which covers a distance of about 2,400 Km. Their width varies from 400 Km in Kashmir to 150 Km in Arunachal Pradesh. The altitudinal variations are greater in the eastern half than those in the western half. The Himalaya consists of three parallel ranges in its longitudinal extent. A number of valleys lie between these ranges. The northern most range is known as the Great or Inner Himalayas or the 'Himadri'. It is the most continuous range consisting of the loftiest peaks with an average height of 6,000 metres. It contains all the prominent Himalayan peaks.



Relief

#### Some Highest Peaks of the Himalayas

Peak	Country	Height in metres
Mt. Everest	Nepal	8848
Kanchenjunga	India	8598
Makalu	Nepal	8481
Dhaulagiri	Nepal	8172
Nanga Parbat	India	8126
Annapurna	Nepal	8078
Nanda Devi	India	7817
Kamet	India	7756
Namcha Barwa	India	7756
Gurla Mandhata	Nepal	7728

The folds of Great Himalayas are asymmetrical in nature. The core of this part of Himalayas is composed of granite. It is perennially snow bound, and a number of glaciers descend from this range.

The range lying to the south of the Himadri forms the most rugged mountain system and is known as Himachal or lesser Himalaya. The ranges are mainly composed of highly compressed and altered rocks. The altitude varies between 3,700 and 4,500 metres and the average width is of 50 Km. While the Pir Panjal range forms the longest and the most important range, the Dhauladhar and the Mahabharat ranges are also prominent ones. This range consists of the famous valley of Kashmir, the Kangra and Kullu Valley in Himachal Pradesh. This region is well known for its hill stations.

The outer most range of the Himalayas is called the **Shiwaliks**. They extend over a width of 10-50 Km and have an altitude varying between 900 and 1100 metres. These ranges are composed of unconsolidated sediments brought down by rivers from the main Himalayan ranges located farther north. These valleys are covered with thick gravel and alluvium. The longitudinal valley lying between lesser Himalaya and the Shiwaliks are known as Duns. Dehra Dun, Kotli Dun and Patli Dun are some of the well-known Duns. Besides the longitudinal divisions, the Himalayas have been divided on the basis of regions from west to east.



These divisions have been demarcated by river valleys. For example, the part of Himalayas lying between Indus and Satluj has been traditionally known as Punjab Himalaya but it is also known regionally as Kashmir and Himachal Himalaya from west to east respectively. The part of the Himalayas lying between Satluj and Kali rivers is known as Kumaon Himalayas. The Kali and Tista rivers demarcate the Nepal Himalayas and the part lying between Tista and Dihang rivers is known as Assam Himalayas. There are regional names also in these broad categories. Find out some regional names of the Himalayas.

The Brahmaputra marks the eastern most boundary of the Himalayas. Beyond the Dihang gorge, the Himalayas bend sharply to the south and spread along the eastern boundary of India. They are known as the Purvachal or the Eastern hills and mountains. These hills running through the north-eastern states are mostly composed of strong sandstones which are sedimentary rocks. Covered with dense forests, they mostly run as parallel ranges and valleys. The Purvachal comprises the Patkai hills, the Naga hills, Manipur hills and the Mizo hills.

### The Northern Plain

The northern plain has been formed by the interplay of the three major river systems, namely— the Indus, the Ganga and the Brahmaputra along with their tributaries. This plain is formed of alluvial soil. The deposition of alluvium in a vast basin lying at the foothills of the Himalaya over millions of years, formed this fertile plain. It spreads over an area of 7 lakh sq. km. The plain being about 2400 Km long and 240 to 320 Km broad, is a densely populated physiographic division. With a rich soil cover combined with adequate water supply and favourable climate it is agriculturally a very productive part of India.

**Do you know?** *Majuli, in the Brahmaputra River is the largest inhabited riverine island in the world.*

The rivers coming from northern mountains are involved in depositional work. In the lower course, due to gentle slope, the velocity of the river decreases which results in the formation of riverine islands. The rivers in their lower course split into numerous channels due to the deposition of silt. These channels are known as distributaries. The Northern Plain is broadly divided into three sections. The Western part of the Northern Plain is referred to as the Punjab Plains. Formed by the Indus and its tributaries, the larger part of this plain lies in Pakistan. The Indus and its tributaries—the Jhelum, the Chenab, the Ravi, the Beas and the Satluj originate in the Himalaya. This section of the plain is dominated by the doabs.

**Do you know?** *'Doab' is made up of two words- 'do' meaning two and 'ab' meaning water. Similarly 'Punjab' is also made up two words- 'Punj' meaning five and 'ab' meaning water.*

The Ganga plain extends between Ghaggar and Teesta rivers. It is spread over the states of North India, Haryana, Delhi, U.P., Bihar, partly Jharkhand and West Bengal to its East, particularly in Assam lies the Brahmaputra plain.

The northern plains are generally described as flat land with no variations in its relief. It is not true. These vast plains also have diverse relief features. According to the variations in relief features, the Northern plains can be divided into four regions. The rivers, after descending from the mountains deposit pebbles in a narrow belt of about 8 to 16 km in width lying parallel to the slopes of the Shiwaliks. It is known as bhabar. All the streams disappear in this bhabar belt. South of this belt, the

streams and rivers re-emerge and create a wet, swampy and marshy region known as terai. This was a thickly forested region full of wildlife. The forests have been cleared to create agricultural land and to settle migrants from Pakistan after partition. Locate Dudhwa National Park in this region.

The largest part of the northern plain is formed of older alluvium. They lie above the flood plains of the rivers and present a terrace like feature. This part is known as bhangar. The soil in this region contains calcareous deposits locally known as kankar. The newer, younger deposits of the flood plains are called khadar. They are renewed almost every year and so are fertile, thus, ideal for intensive agriculture.

### The Peninsular Plateau

The Peninsular plateau is a tableland composed of the old crystalline, igneous and metamorphic rocks. It was formed due to the breaking and drifting of the Gondwana land and thus, making it a part of the oldest landmass. The plateau has broad and shallow valleys and rounded hills. This plateau consists of two broad divisions, namely, the Central Highlands and the Deccan Plateau. The part of the Peninsular plateau lying to the north of the Narmada river covering a major area of the Malwa plateau is known as the Central Highlands. The Vindhyan range is bounded by the Central Highlands on the south and the Aravalis on the northwest. The further westward extension gradually merges with the sandy and rocky desert of Rajasthan. The flow of the rivers draining this region, namely the Chambal, the Sind, the Betwa and Ken is from southwest to northeast, thus indicating the slope. The Central Highlands are wider in the west but narrower in the east. The eastward extensions of this plateau are locally known as the Bundelkhand and Baghelkhand. The Chotanagpur plateau marks the further eastward extension, drained by the Damodar river.

The Deccan Plateau is a triangular landmass that lies to the south of the river Narmada. The Satpura range flanks its broad base in the north while the Mahadev, the Kaimur hills and the Maikal range form its eastern extensions. The Deccan Plateau is higher in the west and slopes gently eastwards. An extension of the Plateau is also visible in the northeast— locally known as the Meghalaya, Karbi-Anglong Plateau and North Cachar Hills. It is separated by a fault from the Chotanagpur Plateau. Three Prominent hill ranges from the west to east are the Garo, the Khasi and the Jaintia Hills.

The Western Ghats and the Eastern Ghats mark the western and the eastern edges of the Deccan Plateau respectively. Western Ghats lie parallel to the western coast. They are continuous and can be crossed through passes only. Locate the Thal, Bhore and the Pal Ghats in the Physical map of India.

The Western Ghats are higher than the Eastern Ghats. Their average elevation is 900–1600 metres as against 600 metres of the Eastern Ghats. The Eastern Ghats stretch from the Mahanadi Valley to the Nigiris in the south. The Eastern Ghats are discontinuous and irregular and dissected by rivers draining into the Bay of Bengal. The Western Ghats cause orographic rain by facing the rain bearing moist winds to rise along the western slopes of the Ghats. The Western Ghats are known by different local names. The height of the Western Ghats progressively increases from north to south. The highest peaks include the Anai Mudi (2,695 metres) and the Doda Betta (2,637 metres). Mahendragiri (1,501 metres) is the highest peak in the Eastern Ghats. Shevroy Hills and the Javadi Hills are



located to the southeast of the Eastern Ghats. Locate the famous hill stations of Udagamandalam, popularly known as Ooty and the Kodaikanal.

One of the distinct features of the peninsular plateau is the black soil area known as Deccan Trap. This is of volcanic origin hence the rocks are igneous. Actually these rocks have denuded over time and are responsible for the formation of black soil. The Aravali Hills lie on the western and northwestern margins of the peninsular plateau. These are highly eroded hills and are found as broken hills. They extend from Gujarat to Delhi in a southwest-northeast direction.

### The Indian Desert

The Indian desert lies towards the western margins of the Aravali Hills. It is an undulating sandy plain covered with sand dunes. This region receives very low rainfall below 150 mm per year. It has arid climate with low vegetation cover. Streams appear during the rainy season. Soon after they disappear into the sand as they do not have enough water to reach the sea. Luni is the only large river in this region.

Barchans (crescent shaped dunes) cover larger areas but longitudinal dunes become more prominent near the Indo-Pakistan boundary. If you visit Jaisalmer, you may go to see a group of barchans.

### The Coastal Plains

The Peninsular plateau is flanked by stretch of narrow coastal strips, running along the Arabian Sea on the west and the *Bay of Bengal* on the east. The western coast, sandwiched between the Western Ghats and the Arabian Sea, is a narrow plain. It consists of three sections. The northern part of the coast is called the Konkan (Mumbai – Goa), the central stretch is called the Kannad Plain while the southern stretch is referred to as the Malabar coast.

The plains along the Bay of Bengal are wide and level. In the northern part, it is referred to as the Northern Circar, while the southern part is known as the Coromandel Coast. Large rivers such as the Mahanadi, the Godavari, the Krishna and the Kaveri have formed extensive delta on this coast. Lake Chilika is an important feature along the eastern coast.

**Do you know?** The Chilika Lake is the largest salt water lake in India. It lies in the state of Orissa, to the south of the Mahanadi delta.

### The Islands

You have already seen that India has a vast main land. Besides this, the country has also two groups of islands. Can you identify these island groups?

Locate the Lakshadweep Islands group lying close to the Malabar coast of Kerala. This group of islands is composed of small coral islands. Earlier they were known as Laccadive, Minicoy and Amindive. In 1973 these were named as Lakshadweep. It covers small area of 32 sq km. Kavaratti island is the administrative headquarters of Lakshadweep. This island group has great diversity of flora and fauna. The Pitti island, which is uninhabited, has a bird sanctuary.

### Corals

Coral polyps are short-lived microscopic organisms, which live in colonies. They flourish in shallow, mud free and warm waters. They secrete calcium carbonate. The coral secretion and their skeletons form coral deposits in the form of reefs; they are mainly of three kinds: barrier reef, fringing reef and atolls. The Great Barrier Reef of Australia is a good example of the first kind of coral reefs. Atolls are circular or horse shoe shaped coral reefs.

Now you see the elongated chain of islands located in the Bay of Bengal extending from north to south. These are Andaman and Nicobar islands. They are bigger in size and are more numerous and scattered. The entire group of islands is divided into two broad categories – The Andaman in the north and the Nicobar in the south. It is believed that these islands are an elevated portion of submarine mountains. These island groups are of great strategic importance for the country. There is great diversity of flora and fauna in this group of islands too. These islands lie close to equator and experience equatorial climate and has thick forest cover.

**Do you know?** India's only active volcano is found on Barren island in Andaman and Nicobar group of Islands.

A detailed account of the different physiographic units highlights the unique features of each region. It would, however, be clear that each region complements the other and makes the country richer in its natural resources. The mountains are the major sources of water and forest wealth. The northern plains are the granaries of the country. They provide the base for early civilisations. The plateau is a storehouse of minerals, which has played a crucial role in the industrialisation of the country. The coastal region and island groups provide sites for fishing and port activities. Thus, the diverse physical features of the land have immense future possibilities of development.

**Important Terms Gondwanaland:** It is the name of an ancient super continent that incorporated present day South America, Africa, Arabia, Madagascar, India, Australia and Antarctica. **Convergent boundary:** It is a boundary, where two plates are moving towards each other and colliding. It is also termed as folding movement or destructive boundary.

**Divergent boundary:** It is a boundary, where plates move away from each other, it is also called faulting movement.

**Transform boundary:** It is a boundary, where in the event of coming together, plates may collide or may slide under each other. **Himadri:** The northern-most range is known as the Greater or Inner Himalayas or the 'Himadri'. **Bhabar:** Bhabar is a belt of pebbles extending from 8-16 km in width in which stream disappears. **Terai:** Terai is a wet, swampy, marshy region with thick forests and wildlife. **Bhangar:** Bhangar is a terrace-like feature made of old alluvium. It contains calcareous deposits called Kankar. **Khadar:** Khadar is the flood plain which is renewed every year and is very fertile.

**Island:** A piece of land that is completely surrounded by sea, a river or lake. **Coral polyps:** Short-lived microscopic organisms, which live in colonies. **Flora:** The plants of a particular region or period. **Fauna:** The collective term for the species of animals in a particular region or period.

## Chapter 3 Drainage

The term **drainage** describes the river system of an area. Look at the physical map. You will notice that small streams flowing from different directions come together to form the main river, which ultimately drains into a large water body such as a lake or a sea or an ocean. The area drained by a single river system is called a **drainage basin**. A closer observation on a map will indicate that any elevated area, such as a mountain or an upland, separates two drainage basins. Such an upland is known as a **water divide** ().

**Do you know?** The world's largest drainage basin is of the Amazon river

### Find Out

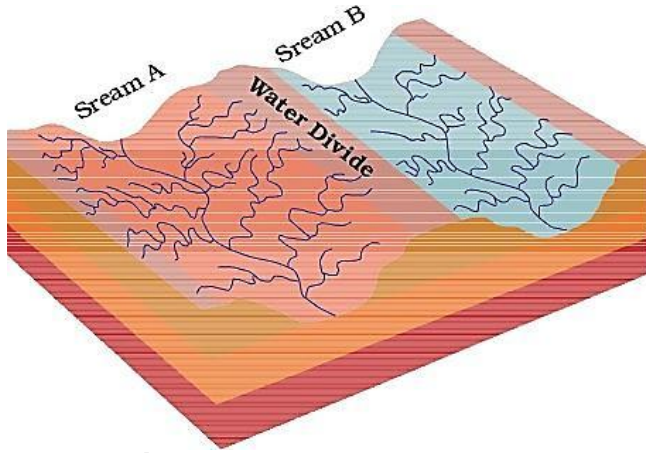
- Which river has the largest basin in India?

### DRAINAGE SYSTEMS IN INDIA

The drainage systems of India are mainly controlled by

the broad relief features of the subcontinent. Accordingly, the Indian rivers are divided into two major groups:

- the Himalayan rivers; and
- the Peninsular rivers.



### Water Divide

Apart from originating from the two major physiographic regions of India, the Himalayan and the Peninsular rivers are different from each other in many ways. Most of the Himalayan rivers are **perennial**. It means that they have water throughout the year. These rivers receive water from rain as well as from melted snow from the lofty mountains.

### Drainage Patterns

The streams within a drainage basin form certain patterns, depending on the slope of land, underlying rock structure as well as the climatic conditions of the area. These are dendritic, trellis, rectangular, and radial patterns. The dendritic pattern develops where the river channel follows the slope of the terrain. The stream with its tributaries resembles the branches of a tree, thus the name dendritic. A river joined by its tributaries, at approximately right angles, develops a trellis pattern. A trellis drainage pattern develops where hard and soft rocks exist parallel to each other. A rectangular drainage pattern develops on a strongly jointed rocky terrain. The radial pattern develops when streams flow in different directions from a central peak or dome like structure.

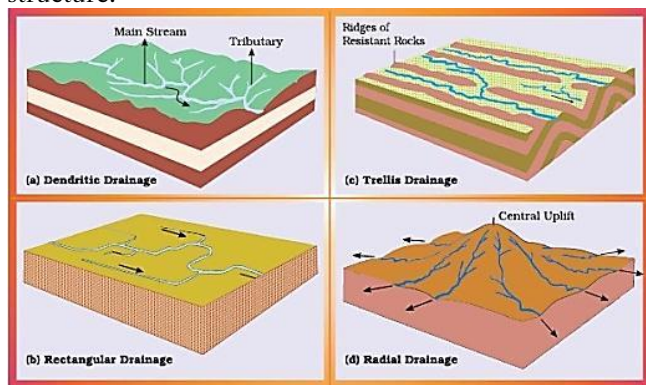


fig 3.1 water divide

A combination of several patterns may be found in the same drainage basin.

The two major Himalayan rivers, the Indus and the Brahmaputra originate from the north of the mountain ranges. They have cut through the mountains making gorges. The Himalayan rivers have long courses from their source to the sea. They perform intensive erosional activity in their upper courses and carry huge loads of silt and sand. In the middle and the lower courses, these rivers form meanders, oxbow lakes, and many other depositional features in their floodplains.

They also have well-developed deltas ( ).

A large number of the Peninsular rivers are seasonal, as their flow is dependent on rainfall. During the dry season, even the large rivers have reduced flow of water in their channels. The Peninsular rivers have shorter and shallower courses as compared to their Himalayan counterparts. However, some of them originate in the central highlands and flow towards the west. Can you identify two such large rivers? Most of the rivers of peninsular India originate in the Western Ghats and flow towards the Bay of Bengal.

### The Himalayan Rivers

The major Himalayan rivers are the Indus, the Ganga and the Brahmaputra. These rivers are long, and are joined by many large and important tributaries. A river along with its tributaries may be called a **river system**.

#### The Indus River System

The river Indus rises in Tibet, near Lake Mansarowar. Flowing west, it enters India in the Ladakh district of Jammu and Kashmir. It forms a picturesque gorge in this part. Several tributaries, the Zaskar, the Nubra, the Shyok and the Hunza, join it in the Kashmir region. The Indus flows through Baltistan and Gilgit and emerges from the mountains at Attock. The Satluj, the Beas, the Ravi, the Chenab and the Jhelum join together to enter the Indus near Mithankot in Pakistan. Beyond this, the Indus flows southwards eventually reaching the Arabian Sea, east of Karachi. The Indus plain has a very gentle slope. With a total length of 2900 km, the Indus is one of the longest rivers of the world. A little over a third of the Indus basin is located in India in the states of Jammu and Kashmir, Himachal Pradesh and the Punjab and the rest is in Pakistan.

**Do you know?** According to the regulations of the Indus Water Treaty (1960), India can use only 20 per cent of the total water carried by Indus river system. This water is used for irrigation in the Punjab, Haryana and the southern and western parts of Rajasthan.

#### The Ganga River System

The headwaters of the Ganga, called the 'Bhagirathi' is fed by the Gangotri Glacier and joined by the Alaknanda at Devprayag in Uttarakhand. At Haridwar the Ganga emerges from the mountains on to the plains.

The Ganga is joined by many tributaries from the Himalayas, a few of them being major rivers such as the Yamuna, the Ghaghara, the Gandak and the Kosi. The river Yamuna rises from the Yamunotri Glacier in the Himalayas. It flows parallel to the Ganga and as a right bank tributary, meets the Ganga at Allahabad. The Ghaghara, the Gandak and the Kosi rise in the Nepal Himalaya. They are the rivers, which flood parts of the northern plains every year, causing widespread damage to life and property but enriching the soil for the extensive agricultural lands.

The main tributaries, which come from the peninsular uplands, are the Chambal, the Betwa and the Son. These rise from semi arid areas, have shorter courses and do not carry much water in them. Find out where and how they ultimately join the Ganga.

Enlarged with the waters from its right and left bank tributaries, the Ganga flows eastwards till Farakka in West Bengal. This is the northernmost point of the Ganga delta. The river bifurcates here; the Bhagirathi-Hooghly (a distributary) flows southwards through the deltaic plains to the Bay of Bengal. The mainstream, flows southwards into Bangladesh and is joined by the Brahmaputra. Further down stream, it is known as the Meghna. This mighty river, with waters from the Ganga, and the Brahmaputra, flows into the Bay of Bengal. The



delta formed by these rivers is known as the Sunderban delta.

**Do you know?** The Sunderban Delta derived its name from the Sundari tree which grows well in marshland. It is the world's largest and fastest growing delta. It is also the home of Royal Bengal tiger.

The length of the Ganga is over 2500 km. Look at ; can you identify the type of drainage pattern formed by the

Ganga river system? Ambala is located on the water divide between the Indus and the Ganga river systems. The plains from Ambala to the Sunderban stretch over nearly 1800 km, but the fall in its slope is hardly 300 metres. In other words, there is a fall of just one metre for every 6 km. Therefore, the river develops large meanders.

*The Brahmaputra River System*



*Major Rivers and Lakes*

The Brahmaputra rises in Tibet east of Mansarovar lake very close to the sources of the Indus and the Satluj. It is slightly longer than the Indus, and most of its course lies

outside India. It flows eastwards parallel to the Himalayas. On reaching the Namcha Barwa (7757 m), it takes a 'U' turn and enters India in Arunachal Pradesh through a gorge. Here, it is called the Dihang and it is



joined by the Dibang, the Lohit, and many other tributaries to form the Brahmaputra in Assam.

**Do you know?** Brahmaputra is known as the Tsang Po in Tibet and Jamuna in Bangladesh.

In Tibet the river carries a smaller volume of water and less silt as it is a cold and a dry area. In India it passes through a region of high rainfall. Here the river carries a large volume of water and considerable amount of silt. The Brahmaputra has a braided channel in its entire length in Assam and forms many riverine islands. Do you remember the name of the world's largest riverine island formed by the Brahmaputra?

Every year during the rainy season, the river overflows its banks, causing widespread devastation due to floods in Assam and Bangladesh. Unlike other north Indian rivers the Brahmaputra is marked by huge deposits of silt on its bed causing the river bed to rise. The river also shifts its channel frequently.

### The Peninsular Rivers

The main water divide in Peninsular India is formed by the Western Ghats, which runs from north to south close to the western coast. Most of the major rivers of the Peninsula such as the Mahanadi, the Godavari, the Krishna and the Kaveri flow eastwards and drain into the Bay of Bengal. These rivers make deltas at their mouths. There are numerous small streams flowing west of the Western Ghats. The Narmada and the Tapi are the only long rivers, which flow west and make estuaries. The drainage basins of the peninsular rivers are comparatively small in size.

#### The Narmada Basin

The Narmada rises in the Amarkantak hills in Madhya Pradesh. It flows towards the west in a rift valley formed due to faulting. On its way to the sea, the Narmada creates many picturesque locations. The 'Marble rocks', near Jabalpur where the Narmada flows through a deep gorge, and the 'Dhuadhar falls' where the river plunges over steep rocks, are some of the notable ones.

All the tributaries of the Narmada are very short and most of these join the main stream at right angles. The Narmada basin covers parts of Madhya Pradesh and Gujarat.

#### The Tapi Basin

The Tapi rises in the Satpura ranges, in the Betul district of Madhya Pradesh. It also flows in a rift valley parallel to the Narmada but it is much shorter in length. Its basin covers parts of Madhya Pradesh, Gujarat and Maharashtra.

The coastal plains between Western Ghats and the Arabian sea are very narrow. Hence, the coastal rivers are short. The main west flowing rivers are Sabarmati, Mahi, Bharathpuzha and Periyar. Find out the states in which these rivers drain the water.

#### The Godavari Basin

The Godavari is the largest Peninsular river. It rises from the slopes of the Western Ghats in the Nasik district of Maharashtra. Its length is about 1500 km. It drains into the Bay of Bengal. Its drainage basin is also the largest among the peninsular rivers. The basin covers parts of Maharashtra (about 50 per cent of the basin area lies in Maharashtra), Madhya Pradesh, Orissa and Andhra Pradesh. The Godavari is joined by a number of tributaries such as the Purna, the Wardha, the Pranhita, the Manjra, the Wainganga and the Penganga. The last three tributaries are very large. Because of its length and the area it covers, it is also known as the 'Dakshin Ganga'.

#### The Mahanadi Basin

The Mahanadi rises in the highlands of Chhattisgarh. It

flows through Orissa to reach the Bay of Bengal. The length of the river is about 860 km. Its drainage basin is shared by Maharashtra, Chhattisgarh, Jharkhand, and Orissa.

#### The Krishna Basin

Rising from a spring near Mahabaleshwar, the Krishna flows for about 1400 km and reaches the Bay of Bengal. The Tungabhadra, the Koyana, the Ghatprabha, the Musi and the Bhima are some of its tributaries. Its drainage basin is shared by Maharashtra, Karnataka and Andhra Pradesh.

#### The Kaveri Basin

The Kaveri rises in the Brahmagiri range of the Western Ghats and it reaches the Bay of Bengal in south of Cuddalore, in Tamil Nadu. Total length of the river is about 760 km. Its main tributaries are Amravati, Bhavani, Hemavati and Kabini. Its basin drains parts of Karnataka, Kerala and Tamil Nadu.

**Do you know?** The river Kaveri makes the second biggest waterfall in India, known as Sivasamudram. The hydroelectric power generated from the falls is supplied to Mysore, Bangalore and the Kolar Gold Field. Besides these major rivers, there are some smaller rivers flowing towards the east. The Damoder, the Brahmani, the Baitarni and the Subarnrekha are some notable examples. Locate them in your atlas.

**Do you know?** 71 per cent of the world's surface is covered with water, but 97 per cent of that is salt water. • Of the 3 per cent that is available as freshwater, three quarters of it is trapped as ice.

### LAKES

You may be familiar with the valley of Kashmir and the famous Dal Lake, the house boats and shikaras, which attract thousands of tourists every year. Similarly, you may have visited some other tourist spot near a lake and enjoyed boating, swimming and other water games. Imagine that if Srinagar, Nainital and other tourists places did not have a lake would they have been as attractive as they are today? Have you ever tried to know the importance of lakes in making a place attractive to tourists? Apart from attraction for tourists lakes are also useful to human beings in many ways. India has many lakes. These differ from each other in the size, and other characteristics. Most lakes are permanent; some contain water only during the rainy season, like the lakes in the basins of inland drainage of semi-arid regions. There are some of the lakes which are the result of the action of glaciers and ice sheets, while the others have been formed by wind, river action, and human activities.

A meandering river across a flood plain forms cut-offs that later develop into ox-bow lakes. Spits and bars form lagoons in the coastal areas, eg the Chilika lake, the Pulicat lake, the Kolleru lake. Lakes in the region of inland drainage are sometimes seasonal; for example, the Sambhar lake in Rajasthan, which is a salt water lake. Its water is used for producing salt.

Most of the fresh water lakes are in the Himalayan region. They are of glacial origin. In other words, they formed when glaciers dug out a basin, which was later filled with snowmelt. The Wular lake in Jammu and Kashmir, in contrast, is the result of the tectonic activity. It is the largest freshwater lake in India. The Dal lake, Bhimtal, Nainital, Loktak and Barapani are some other important fresh water lakes.

Apart from natural lakes, the damming of the rivers for the generation of hydel power has also led to the formation of Lakes such as Guru Gobind Sagar (Bhakra Nangal Project).

Lakes are of great value to human beings. A lake helps to regulate the flow of a river. During heavy rainfall, it prevents flooding and during the dry season, it helps to maintain an even flow of water. Lakes can also be used for developing hydel power. They moderate the climate of the surroundings; maintain the aquatic ecosystem, enhance natural beauty, help develop tourism and provide recreation.

### ROLE OF RIVERS IN ECONOMY

Rivers have been of fundamental importance throughout the human history. Water from the rivers is a basic natural resource, essential for various human activities. Therefore, the river banks have attracted settlers from ancient times. These settlements have now become big cities. Make a list of cities in your state which are located on the bank of a river.

Using rivers for irrigation, navigation, hydro-power generation is of special significance – particularly to a country like India, where agriculture is the major source of livelihood of the majority of its population.

### RIVER POLLUTION

The growing domestic, municipal, industrial and agricultural demand for water from rivers naturally affects the quality of water. As a result, more and more water is being drained out of the rivers reducing their volume. On the other hand, a heavy load of untreated

#### National River Conservation Plan (NRCP)

The activities of Ganga Action Plan (GAP) phase-I, initiated in 1985, were declared closed on 31st March 2000. The Steering Committee of the National River Conservation Authority reviewed the progress of the GAP and necessary correction on the basis of lessons learnt and experiences gained from GAP Phase-I. These have been applied to the major polluted rivers of the country under the NRCP.

The Ganga Action Plan (GAP) Phase-II, has been merged with the NRCP. The expanded NRCP now covers 152 towns located along 27 interstate rivers in 16 states. Under this action plan, pollution abatement works are being taken up in 57 towns. A total of 215 schemes of pollution abatement have been sanctioned. So far, 69 schemes have been completed under this action plan. A million litres of sewage is targeted to be intercepted, diverted and treated. sewage and industrial effluents are emptied into the rivers. This affects not only the quality of water but also the self-cleansing capacity of the river. For example, given the adequate streamflow, the Ganga water is able to dilute and assimilate pollution loads within 20 km of large cities. But the increasing urbanisation and industrialisation do not allow it to happen and the pollution level of many rivers has been rising. Concern over rising pollution in our rivers led to the launching of various action plans to clean the rivers. Have you heard about such action plans? How does our health get affected by polluted river water? Think about “life of human beings without fresh water”. Arrange a debate on this topic in the class.

**Important Terms** **Basin:** A part of the earth's surface consisting of rock strata that slopes down to a common centre. **Drainage Basin:** The area drained by a single river system is called a drainage basin. **Water divide:** Any elevated area, such as a mountain or an upland, separating two drainage basins. Such an upland is known as a water divide. **Perennial:** It is a stream or river that exhibits continuous flow of water throughout the year. **Dendritic:** The stream with its tributaries which resembles the branches of a tree. Thus, the name dendritic. **Trellis:** A river joined by its tributaries, at approximately right angles, develops a trellis pattern.

**Rectangular:** A drainage pattern that develops on a strongly joint rocky terrain. **Radial:** The radial pattern develops when streams flow in different directions from a central peak or dome-like structure. **Distributary:** A stream or small river that splits off from a larger river and flows in a different direction. **Tributary:** A river or stream that flows into a larger river or lake. **Estuary:** The tidal mouth of a large river, where the tide meets the stream. **Ox-bow lake:** It is a U-shaped water body formed when a meandering river is cut off from the mainstream. **Lagoon:** When the lake is formed by spits and bars in coastal areas, it is called a lagoon. **Glacial lake:** A lake formed by melting of the glacier is called a glacial lake.

## Chapter 4 Climate

In the last two chapters you have read about the landforms and the drainage of our country. These are the two of the three basic elements that one learns about the natural environment of any area. In this chapter you will learn about the third, that is, the atmospheric conditions that prevail over our country. Why do we wear woollens in December or why it is hot and uncomfortable in the month of May, and why it rains in June - July? The answers to all these questions can be found out by studying about the climate of India.

**Climate** refers to the sum total of weather conditions and variations over a large area for a long period of time (more than thirty years). **Weather** refers to the state of the atmosphere over an area at any point of time. The elements of weather and climate are the same, i.e. temperature, atmospheric pressure, wind, humidity and precipitation. You may have observed that the weather conditions fluctuate very often even within a day. But there is some common pattern over a few weeks or months, i.e. days are cool or hot, windy or calm, cloudy or bright, and wet or dry. On the basis of the generalised monthly atmospheric conditions, the year is divided into seasons such as winter, summer or rainy seasons. The world is divided into a number of climatic regions. Do you know what type of climate India has and why it is so? We will learn about it in this chapter.

**Do you know?** The word monsoon is derived from the Arabic word ‘mausim’ which literally means season. • ‘Monsoon’ refers to the seasonal reversal in the wind direction during a year.

The climate of India is described as the ‘monsoon’ type. In Asia, this type of climate is found mainly in the south and the southeast. Despite an overall unity in the general pattern, there are perceptible regional variations in climatic conditions within the country. Let us take two important elements – temperature and precipitation, and examine how they vary from place to place and season to season.

In summer, the mercury occasionally touches 50°C in some parts of the Rajasthan desert, whereas it may be around 20°C in Pahalgam in Jammu and Kashmir. On a winter night, temperature at Drass in Jammu and Kashmir may be as low as minus 45°C. Thiruvananthapuram, on the other hand, may have a temperature of 22°C.

**Do you know?** In certain places there is a wide difference between day and night temperatures. In the Thar Desert the day temperature may rise to 50°C, and drop down to near 15°C the same night. On the other hand, there is hardly any difference in day and night temperatures in the Andaman and Nicobar islands or in Kerala.

Let us now look at precipitation. There are variations not only in the form and types of precipitation but also

in its amount and the seasonal distribution. While precipitation is mostly in the form of snowfall in the upper parts of Himalayas, it rains over the rest of the country. The annual precipitation varies from over 400 cm in Meghalaya to less than 10 cm in Ladakh and western Rajasthan. Most parts of the country receive rainfall from June to September. But some parts like the Tamil Nadu coast gets a large portion of its rain during October and November.

In general, coastal areas experience less contrasts in temperature conditions. Seasonal contrasts are more in the interior of the country. There is decrease in rainfall generally from east to west in the Northern Plains. These variations have given rise to variety in lives of people – in terms of the food they eat, the clothes they wear and also the kind of houses they live in.

### CLIMATIC CONTROLS

There are six major controls of the climate of any place. They are: **latitude, altitude, pressure and wind system, distance from the sea** (continentality), **ocean currents and relief features**.

Due to the curvature of the earth, the amount of solar energy received varies according to **latitude**. As a result, air temperature generally decreases from the equator towards the poles. As one goes from the surface of the earth to **higher altitudes**, the atmosphere becomes less dense and temperature decreases. The hills are therefore cooler during summers. The **pressure and wind** system of any area depend on the latitude and altitude of the place. Thus it influences the temperature and rainfall pattern. The sea exerts a moderating influence on climate: As the **distance from the sea** increases, its moderating influence decreases and the people experience extreme weather conditions. This condition is known as continentality (i.e. very hot during summers and very cold during winters). **Ocean currents** along with onshore winds affect the climate of the coastal areas. For example, any coastal area with warm or cold currents flowing past it, will be warmed or cooled if the winds are onshore.

Finally, **relief** too plays a major role in determining the climate of a place. High mountains act as barriers for cold or hot winds; they may also cause precipitation if they are high enough and lie in the path of rain-bearing winds. The leeward side of mountains remains relatively dry.

### FACTORS AFFECTING INDIA'S CLIMATE

#### Latitude

The Tropic of Cancer passes through the middle of the country from the Rann of Kutch in the west to Mizoram in the east. Almost half of the country, lying south of the Tropic of Cancer, belongs to the tropical area. All the remaining area, north of the Tropic, lies in the sub-tropics. Therefore, India's climate has characteristics of tropical as well as subtropical climates.

#### Altitude

India has mountains to the north, which have an average height of about 6,000 metres. India also has a vast coastal area where the maximum elevation is about 30 metres. The Himalayas prevent the cold winds from Central Asia from entering the subcontinent. It is because of these mountains that this subcontinent experiences comparatively milder winters as compared to central Asia.

#### Pressure and Winds

The climate and associated weather conditions in India are governed by the following atmospheric conditions:

- *Pressure and surface winds;*

- *Upper air circulation; and*

- *Western cyclonic disturbances and tropical cyclones.*

India lies in the region of north easterly winds. These winds originate from the subtropical high-pressure belt of the northern hemisphere. They blow south, get deflected to the right due to the Coriolis force, and move on towards the equatorial low-pressure area. Generally, these winds carry very little moisture as they originate and blow over land. Therefore, they bring little or no rain. Hence, India should have been an arid land, but, it is not so. Let us see why?

**Coriolis force:** An apparent force caused by the earth's rotation. The Coriolis force is responsible for deflecting winds towards the right in the northern hemisphere and towards the left in the southern hemisphere. This is also known as 'Ferrel's Law'.

The pressure and wind conditions over India are unique. During winter, there is a high-pressure area north of the Himalayas. Cold dry winds blow from this region to the low-pressure areas over the oceans to the south. In summer, a low-pressure area develops over interior Asia as well as over northwestern India. This causes a complete reversal of the direction of winds during summer. Air moves from the high-pressure area over the southern Indian Ocean, in a south-easterly direction, crosses the equator, and turns right towards the low-pressure areas over the Indian subcontinent. These are known as the Southwest Monsoon winds. These winds blow over the warm oceans, gather moisture and bring widespread rainfall over the mainland of India.

The upper air circulation in this region is dominated by a westerly flow. An important component of this flow is the **jet stream**.

**Jet stream:** These are a narrow belt of high altitude (above 12,000 m) westerly winds in the troposphere. Their speed varies from about 110 km/h in summer to about 184 km/h in winter. A number of separate jet streams have been identified. The most constant are the mid-latitude and the sub tropical jet stream.

These jet streams are located approximately over 27° - 30° north latitude, therefore, they are known as subtropical westerly jet streams. Over India, these jet streams blow south of the Himalayas, all through the year except in summer. The western cyclonic disturbances experienced in the north and north-western parts of the country are brought in by this westerly flow. In summer, the subtropical westerly jet stream moves north of the Himalayas with the apparent movement of the sun. An easterly jet stream, called the sub-tropical easterly jet stream blows over peninsular India, approximately over 14°N during the summer months.

#### Western Cyclonic Disturbances

The western cyclonic disturbances are weather phenomena of the winter months brought in by the westerly flow from the Mediterranean region. They usually influence the weather of the north and north-western regions of India. Tropical cyclones occur during the monsoon as well as in October - November, and are part of the easterly flow. These disturbances affect the coastal regions of the country. Have you read or heard about the disasters caused by them on Orissa and Andhra Pradesh coast?

#### THE INDIAN MONSOON

The climate of India is strongly influenced by monsoon winds. The sailors who came to India in historic times were one of the first to have noticed the phenomenon of



the monsoon. They benefited from the reversal of the wind system as they came by sailing ships at the mercy of winds. The Arabs, who had also come to India as traders named this seasonal reversal of the wind system 'monsoon'.

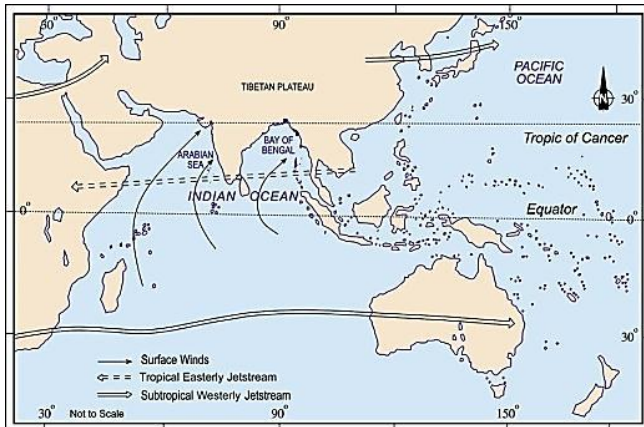
The monsoons are experienced in the tropical area roughly between  $20^{\circ}$  N and  $20^{\circ}$  S. To understand the mechanism of the monsoons, the following facts are important.

(a) **The differential heating and cooling of land and water** creates low pressure on the landmass of India while the seas around experience comparatively high pressure.

(b) **The shift of the position of Inter Tropical Convergence Zone (ITCZ)** in summer, over the Ganga plain (this is the equatorial trough normally positioned about  $5^{\circ}$  N of the equator. It is also known as the monsoon-trough during the monsoon season).

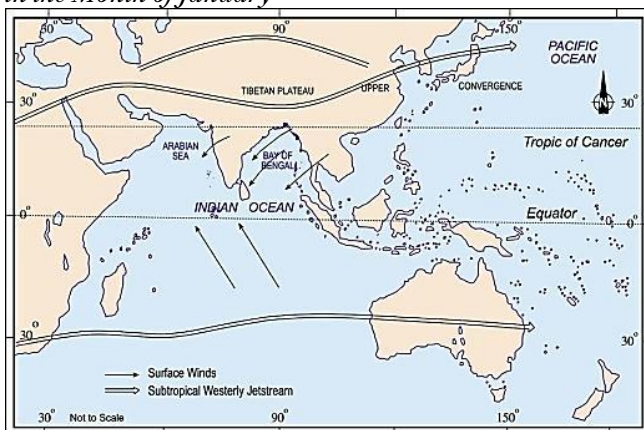
(c) The presence of the **high-pressure area, east of Madagascar**, approximately at  $20^{\circ}$  S over the Indian Ocean. The intensity and position of this high-pressure area affects the Indian Monsoon.

(d) The **Tibetan plateau gets intensely heated** during summer, which results in strong vertical air currents and the formation of low pressure over the plateau at about 9 km above sea level.



The International Boundary shown in this map may not be considered as authentic

*Atmospheric Conditions over the Indian Subcontinent in the Month of January*



The International Boundary shown in this map may not be considered as authentic

*Atmospheric Conditions over the Indian Subcontinent in the Month of June*

(e) The **movement of the westerly jet stream to the north of the Himalayas** and the presence of the **tropical easterly jet stream over the Indian peninsula** during summer.

### Inter Tropical Convergence Zone

The Inter Tropical Convergence Zone (ITCZ,) is a broad trough of low pressure in equatorial latitudes. This is where the northeast and the southeast trade winds

converge. This convergence zone lies more or less parallel to the equator but moves north or south with the apparent movement of the sun.

Apart from this, it has also been noticed that changes in the pressure conditions over the southern oceans also affect the monsoons. Normally when the tropical eastern south Pacific Ocean experiences high pressure, the tropical eastern Indian Ocean experiences low pressure. But in certain years, there is a reversal in the pressure conditions and the eastern Pacific has lower pressure in comparison to the eastern Indian Ocean. This periodic change in pressure conditions is known as the **Southern Oscillation** or **SO**. The difference in pressure over Tahiti (Pacific Ocean,  $18^{\circ}$  S/ $149^{\circ}$  W) and Darwin in northern Australia (Indian Ocean,  $12^{\circ}$  30' S/ $131^{\circ}$  E) is computed to predict the intensity of the monsoons. If the pressure differences were negative, it would mean below average and late monsoons. A feature connected with the SO is the El Nino phenomenon in which a warm ocean current that flows past the Peruvian Coast, in place of the cold Peruvian current, every 2 to 5 years. The changes in pressure conditions are connected to the **El Nino**. Hence, the phenomenon is referred to as **ENSO** (El Nino Southern Oscillations).

**El Nino:** This is a name given to the periodic development of a warm ocean current along the coast of Peru as a temporary replacement of the cold Peruvian current. 'El Nino' is a Spanish word meaning 'the child', and refers to the baby Christ, as this current starts flowing during Christmas. The presence of the El Nino leads to an increase in sea-surface temperatures and weakening of the trade winds in the region.

### The Onset of The Monsoon and Withdrawal

The Monsoon, unlike the trades, are not steady winds but are pulsating in nature, affected by different atmospheric conditions encountered by it, on its way over the warm tropical seas. The duration of the monsoon is between 100-120 days from early June to mid-September. Around the time of its arrival, the normal rainfall increases suddenly and continues constantly for several days. This is known as the '**burst**' of the monsoon, and can be distinguished from the pre-monsoon showers. The monsoon arrives at the southern tip of the Indian peninsula generally by the first week of June. Subsequently, it proceeds into two – the Arabian Sea branch and the Bay of Bengal branch. The Arabian Sea branch reaches Mumbai about ten days later on approximately the 10th of June. This is a fairly rapid advance. The Bay of Bengal branch also advances rapidly and arrives in Assam in the first week of June. The lofty mountains causes the monsoon winds to deflect towards the west over the Ganga plains. By mid-June the Arabian Sea branch of the monsoon arrives over Saurashtra-Kuchchh and the central part of the country. The Arabian Sea and the Bay of Bengal branches of the monsoon merge over the northwestern part of the Ganga plains. Delhi generally receives the monsoon showers from the Bay of Bengal branch by the end of June (tentative date is 29th of June). By the first week of July, western Uttar Pradesh, Punjab, Haryana and eastern Rajasthan experience the monsoon. By mid-July, the monsoon reaches Himachal Pradesh and the rest of the country.

Withdrawal or the retreat of the monsoon is a more gradual process. The withdrawal of the monsoon begins in northwestern states of India by early September. By mid-October, it withdraws completely from the northern half of the peninsula. The withdrawal from the

southern half of the peninsula is fairly rapid. By early December, the monsoon has withdrawn from the rest of the country.

The islands receive the very first monsoon showers, progressively from south to north, from the last week of April to the first week of May. The withdrawal, takes place progressively from north to south from the first week of December to the first week of January. By this time the rest of the country is already under the influence of the winter monsoon.

### The Seasons

The monsoon type of climate is characterised by a distinct seasonal pattern. The weather conditions greatly change from one season to the other. These changes are particularly noticeable in the interior parts of the country. The coastal areas do not experience much variation in temperature though there is variation in rainfall pattern. How many seasons are experienced in your place? Four main seasons can be identified in India – the cold weather season, the hot weather season, the advancing monsoon and the retreating monsoon with some regional variations.

#### The Cold Weather Season (Winter)

The cold weather season begins from mid-November in northern India and stays till February. December and January are the coldest months in the northern part of India. The temperature decreases from south to the north. The average temperature of Chennai, on the eastern coast, is between 24° - 25° Celsius, while in the northern plains, it ranges between 10° - 15° Celsius. Days are warm and nights are cold. Frost is common in the north and the higher slopes of the Himalayas experience snowfall.

During this season, the northeast trade winds prevail over the country. They blow from land to sea and hence, for most part of the country, it is a dry season. Some amount of rainfall occurs on the Tamil Nadu coast from these winds as, here they blow from sea to land. In the northern part of the country, a feeble high-pressure region develops, with light winds moving outwards from this area. Influenced by the relief, these winds blow through the Ganga valley from the west and the northwest. The weather is normally marked by clear sky, low temperatures and low humidity and feeble, variable winds.

A characteristic feature of the cold weather season over the northern plains is the inflow of cyclonic disturbances from the west and the northwest. These low-pressure systems, originate over the Mediterranean Sea and western Asia and move into India, along with the westerly flow. They cause the much-needed winter rains over the plains and snowfall in the mountains. Although the total amount of winter rainfall locally known as 'mahawat' is small, they are of immense importance for the cultivation of 'rabi' crops.

The peninsular region does not have a well-defined cold season. There is hardly any noticeable seasonal change in temperature pattern during winters due to the moderating influence of the sea.

#### The Hot Weather Season (Summer)

Due to the apparent northward movement of the sun, the global heat belt shifts northward. As such, from March to May, it is hot weather season in India. The influence of the shifting of the heat belt can be seen clearly from temperature recordings taken during March-May at different latitudes. In March, the highest temperature is about 38° Celsius, recorded on the Deccan plateau. In April, temperatures in Gujarat and

Madhya Pradesh are around 42° Celsius. In May, temperature of 45° Celsius is common in the northwestern parts of the country. In peninsular India, temperatures remain lower due to the moderating influence of the oceans.

The summer months experience rising temperature and falling air pressure in the northern part of the country. Towards the end of May, an elongated low-pressure area develops in the region extending from the Thar Desert in the northwest to Patna and Chotanagpur plateau in the east and southeast. Circulation of air begins to set in around this trough.

A striking feature of the hot weather season is the 'loo'. These are strong, gusty, hot, dry winds blowing during the day over the north and northwestern India.

Sometimes they even continue until late in the evening. Direct exposure to these winds may even prove to be fatal. Dust storms are very common during the month of May in northern India. These storms bring temporary relief as they lower the temperature and may bring light rain and cool breeze. This is also the season for localised thunderstorms, associated with violent winds, torrential downpours, often accompanied by hail. In West Bengal, these storms are known as the '*Kaal Baisakhi*'.

Towards the close of the summer season, pre-monsoon showers are common especially, in Kerala and Karnataka. They help in the early ripening of mangoes, and are often referred to as '*mango showers*'.

#### Advancing Monsoon (The Rainy Season)

By early June, the low-pressure condition over the northern plains intensifies. It attracts, the trade winds of the southern hemisphere. These south-east trade winds originate over the warm subtropical areas of the southern oceans. They cross the equator and blow in a south-westerly direction entering the Indian peninsula as the south-west monsoon. As these winds blow over warm oceans, they bring abundant moisture to the subcontinent. These winds are strong and blow at an average velocity of 30 km per hour. With the exception of the extreme north-west, the monsoon winds cover the country in about a month.

The inflow of the south-west monsoon into India brings about a total change in the weather. Early in the season, the windward side of the Western Ghats receives very heavy rainfall, more than 250 cm. The Deccan Plateau and parts of Madhya Pradesh also receive some amount of rain in spite of lying in the rain shadow area. The maximum rainfall of this season is received in the north-eastern part of the country. Mawsynram in the southern ranges of the Khasi Hills receives the highest average rainfall in the world. Rainfall in the Ganga valley decreases from the east to the west. Rajasthan and parts of Gujarat get scanty rainfall.

Another phenomenon associated with the monsoon is its tendency to have 'breaks' in rainfall. Thus, it has wet and dry spells. In other words, the monsoon rains take place only for a few days at a time. They are interspersed with rainless intervals. These breaks in monsoon are related to the movement of the monsoon trough. For various reasons, the trough and its axis keep on moving northward or southward, which determines the spatial distribution of rainfall. When the axis of the monsoon trough lies over the plains, rainfall is good in these parts. On the other hand, whenever the axis shifts closer to the Himalayas, there are longer dry spells in the plains, and widespread rain occur in the mountainous catchment areas of the Himalayan rivers. These heavy rains bring in their wake, devastating floods causing damage to life and property in the plains.



The frequency and intensity of tropical depressions too, determine the amount and duration of monsoon rains. These depressions form at the head of the Bay of Bengal and cross over to the mainland. The depressions follow the axis of the “monsoon trough of low pressure”. The monsoon is known for its uncertainties. The alternation of dry and wet spells vary in intensity, frequency and duration. While it causes heavy floods in one part, it may be responsible for droughts in the other. It is often irregular in its arrival and its retreat. Hence, it sometimes disturbs the farming schedule of millions of farmers all over the country.

### Retreating/Post Monsoons (The Transition Season)

During October–November, with the apparent movement of the sun towards the south, the monsoon trough or the low-pressure trough over the northern plains becomes weaker. This is gradually replaced by a high-pressure system. The south-west monsoon winds weaken and start withdrawing gradually. By the beginning of October, the monsoon withdraws from the Northern Plains.

The months of October–November form a period of transition from hot rainy season to dry winter conditions. The retreat of the monsoon is marked by clear skies and rise in temperature.

**Do you know?** Mawsynram, the wettest place on the earth is also reputed for its stalagmite and stalactite caves.

While day temperatures are high, nights are cool and pleasant. The land is still moist. Owing to the conditions of high temperature and humidity, the weather becomes rather oppressive during the day. This is commonly known as ‘October heat’. In the second half of October, the mercury begins to fall rapidly in northern India.

The low-pressure conditions, over north-western India, get transferred to the Bay of Bengal by early November. This shift is associated with the occurrence of cyclonic depressions, which originate over the Andaman Sea. These cyclones generally cross the eastern coasts of India cause heavy and widespread rain. These tropical cyclones are often very destructive. The thickly populated deltas of the Godavari, the Krishna and the Kaveri are frequently struck by cyclones, which cause great damage to life and property. Sometimes, these cyclones arrive at the coasts of Orissa, West Bengal and Bangladesh. The bulk of the rainfall of the Coromandel Coast is derived from depressions and cyclones.

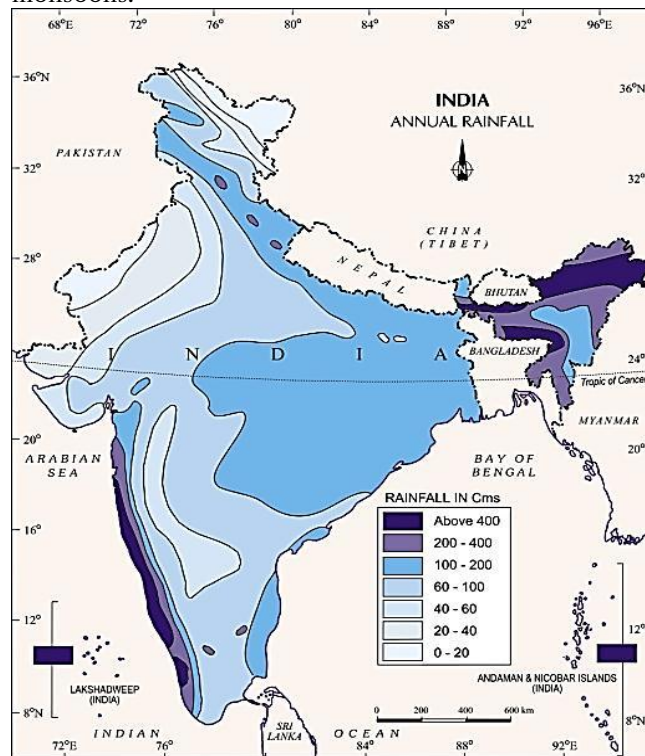
### Distribution of Rainfall

Parts of western coast and northeastern India receive over about 400 cm of rainfall annually. However, it is less than 60 cm in western Rajasthan and adjoining parts of Gujarat, Haryana and Punjab. Rainfall is equally low in the interior of the Deccan plateau, and east of the Sahyadris. Why do these regions receive low rainfall? A third area of low precipitation is around Leh in Jammu and Kashmir. The rest of the country receives moderate rainfall. Snowfall is restricted to the Himalayan region. Owing to the nature of monsoons, the annual rainfall is highly variable from year to year. Variability is high in the regions of low rainfall such as parts of Rajasthan, Gujarat and the leeward side of the Western Ghats. As such, while areas of high rainfall are liable to be affected by floods, areas of low rainfall are drought-prone.

### MONSOON AS A UNIFYING BOND

You have already known the way the Himalayas protect the subcontinent from extremely cold winds from central Asia. This enables northern India to have uniformly higher temperatures when compared to other

areas on the same latitudes. Similarly, the peninsular plateau, under the influence of the sea from three sides, has moderate temperatures. Despite such moderating influences, there are great variations in the temperature conditions. Nevertheless, the unifying influence of the monsoon on the Indian subcontinent is quite perceptible. The seasonal alteration of the wind systems and the associated weather conditions provide a rhythmic cycle of seasons. Even the uncertainties of rain and uneven distribution are very much typical of the monsoons.



### Annual Rainfall

The Indian landscape, its animal and plant life, its entire agricultural calendar and the life of the people, including their festivities, revolve around this phenomenon. Year after year, people of India from north to south and from east to west, eagerly await the arrival of the monsoon. These monsoon winds bind the whole country by providing water to set the agricultural activities in motion. The river valleys which carry this water also unite as a single river valley unit.

**Climate:** General weather conditions over a period of thirty years is said to be the climate of a place. **Elements of weather:** Temperature, atmospheric pressure, wind, humidity and precipitation are elements of weather and climate.

**Subtropical Westerly Jet Streams:** The most constant are the mid-latitude and the sub-tropical jet streams. They originate from the Mediterranean region and are known as subtropical westerly jet streams. **Easterly Jet Stream:** An easterly jet stream, called the tropical easterly jet stream, blows over Peninsular India, approximately over 14°N during the summer months. **Coriolis Force:** It is an apparent force caused by the earth's rotation. This force deflects winds towards the right in the Northern Hemisphere and towards the left in the Southern Hemisphere. **Southern Oscillation:** Changes in pressure over the southern oceans also affect the monsoons. In certain years, there is a reversal in the pressure conditions. This periodic change in pressure conditions is known as the Southern Oscillation or SO. **Burst of Monsoon:** The monsoon arrives with a sudden downpour of rainfall that continues for several days. This is known as the 'burst' of the monsoon. **Mahawat:** The winter rainfall is locally known as Mahawat. **Frost:** A state in freezing, frozen dew. **Loo:** 'Loo' are strong, gusty, hot, dry winds that blow during the day over North and North-Western India. **Mango Showers:** Pre-monsoon showers are often referred to as 'Mango Showers,' as



they help in the early ripening of mangoes. **Retreating monsoon:** The retreating monsoon refers to the transition season that lasts from October to December. **October Heat:** The months of October–November form a period of transition from the hot rainy season to dry winter conditions. The main cause of this transition is the movement of the Sun towards the South. By the beginning of October, the monsoon withdraws from the Northern Plains. The retreating monsoon season is marked by clear skies and a rise in the temperatures. The land is still moist and the weather becomes hot and humid. The days can become quite oppressive. This is commonly known as 'October Heat'.

## Chapter 5

### Natural Vegetation And Wild Life

Our country India is one of the twelve mega bio-diversity countries of the world. With about 47,000 plant species India occupies tenth place in the world and fourth in Asia in plant diversity. There are about 15,000 flowering plants in India which account for 6 per cent in the world's total number of flowering plants. The country has many non-flowering plants such as ferns, algae and fungi. India also has 89,000 species of animals as well as a rich variety of fish in its fresh and marine waters.

Natural vegetation refers to a plant community which has grown naturally without human aid and has been left undisturbed by humans for a long time. This is termed as a virgin vegetation. Thus, cultivated crops and fruits, orchards form part of vegetation but not natural vegetation.

**Do you know?** The virgin vegetation, which are purely Indian are known as endemic or indigenous species but those which have come from outside India are termed as exotic plants.

The term **flora** is used to denote plants of a particular region or period. Similarly, the species of animals are referred to as **fauna**. This huge diversity in flora and fauna kingdom is due to the following factors.

#### RELIEF

##### Land

Land affects the natural vegetation directly and indirectly. Do you expect the same type of vegetation in mountainous, plateau and plain areas or in dry and wet regions? The nature of land influences the type of vegetation. The fertile level is generally devoted to agriculture. The undulating and rough terrains are areas where grassland and woodlands develop and give shelter to a variety of wild life.

##### Soil

The soils also vary over space. Different types of soils provide basis for different types of vegetation. The sandy soils of the desert support cactus and thorny bushes while wet, marshy, deltaic soils support mangroves and deltaic vegetation. The hill slopes with some depth of soil have conical trees.

#### CLIMATE

##### Temperature

The character and extent of vegetation are mainly determined by temperature along with humidity in the air, precipitation and soil. On the slopes of the Himalayas and the hills of the Peninsula above the height of 915 metres, the fall in the temperature affects the types of vegetation and its growth, and changes it from tropical to subtropical temperate and alpine vegetation.

Table 5.1 : Temperature Characteristics of the Vegetation Zones

Vegetation Zones	Mean annual Average Temp. (in degree C)	Mean Temp. in January (in degrees C)	Remarks
Tropical	Above 24°C	Above 18°	No Frost
Sub-tropical	17°C to 24°C	10°C to 18°C	Frost is rare
Temperate	7°C to 17°C	-1°C to (-10) °C	Frost some snow
Alpine	Below 7°C	Below -1°C	Snow

Source : Environment Atlas of India, June 2001, Central Pollution Control Board Delhi

#### Photoperiod (Sunlight)

The variation in duration of sunlight at different places is due to differences in latitude, altitude, season and duration of the day. Due to longer duration of sunlight, trees grow faster in summer.

**Find Out?** Why are the southern slopes in Himalayan region covered with thick vegetation cover as compared to northern slopes of the same hills?

#### Precipitation

In India almost the entire rainfall is brought in by the advancing southwest monsoon (June to September) and retreating northeast monsoons. Areas of heavy rainfall have more dense vegetation as compared to other areas of less rainfall.

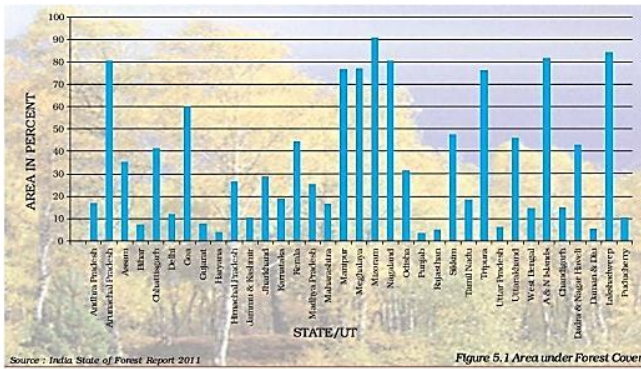
**Find Out** Why have the western slopes of the Western Ghats covered with thick forests and not the eastern slopes?

Have you ever thought as to why forests are important for human beings? Forests are renewable resources and play a major role in enhancing the quality of environment. They modify local climate, control soil erosion, regulate stream flow, support a variety of industries, provide livelihood for many communities and offer panoramic or scenic view for recreation. It controls wind force and temperature and causes rainfall. It provides humus to the soil and shelter to the wild life. India's natural vegetation has undergone many changes due to several factors such as the growing demand for cultivated land, development of industries and mining, urbanisation and over-grazing of pastures. The vegetation cover of India in large parts is no more natural in the real sense. Except in some inaccessible regions like the Himalayas, the hilly region of central India and the marusthali, the vegetation of most of the areas has been modified at some places, or replaced or degraded by human occupancy.

**Do you know?** According to India State of Forest Report 2011, the forest cover in India is 21.05 per cent.

#### ECOSYSTEM

Plants occur in distinct groups of communities in areas having similar climatic conditions. The nature of the plants in an area, to a large extent, determines the animal life in that area. When the vegetation is altered, the animal life also changes. All the plants and animals in an area are interdependent and interrelated to each other in their physical environment, thus, forming an ecosystem. Human beings are also an integral part of the ecosystem. How do the human beings influence the ecology of a region?

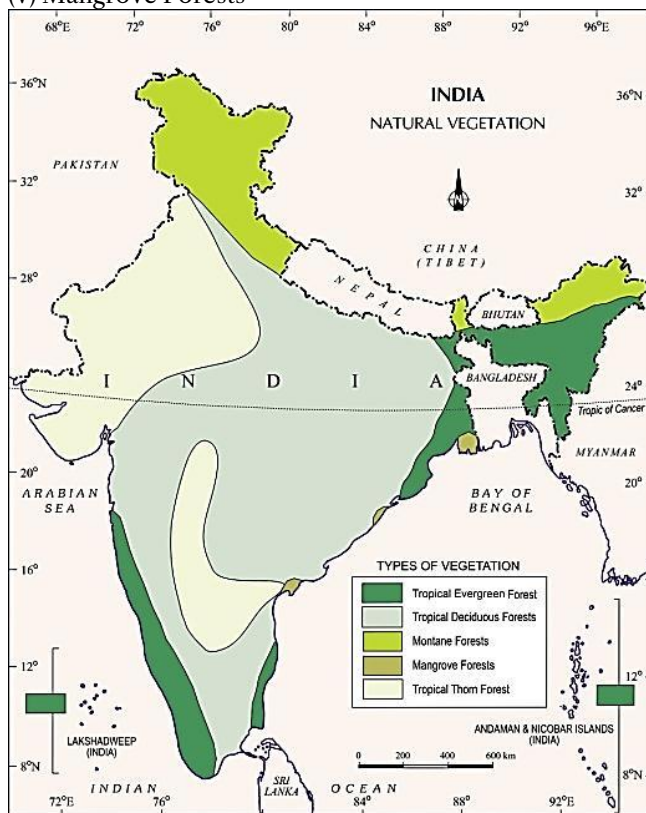


They utilise the vegetation and wild life. The greed of human beings leads to over utilisation of these resources. They cut the trees and kill the animals creating ecological imbalance. As a result some of the plants and animals have reached the verge of extinction. Do you know that a very large ecosystem on land having distinct types of vegetation and animal life is called a biome. The biomes are identified on the basis of plants.

### TYPES OF VEGETATION

The following major types of vegetation may be identified in our country (i).

- (i) Tropical Evergreen Forests
- (ii) Tropical Deciduous Forests
- (iii) Tropical Thorn Forests and Scrubs
- (iv) Montane Forests
- (v) Mangrove Forests



### Natural Vegetation

#### Tropical Evergreen Forests

These forests are restricted to heavy rainfall areas of the Western Ghats and the island groups of Lakshadweep. Study the given map for the forest cover and try to find the reasons as to why certain states have more area under forest as compared to others?

Andaman and Nicobar, upper parts of Assam and Tamil Nadu coast. They are at their best in areas having more than 200 cm of rainfall with a short dry season. The trees reach great heights up to 60 metres or even above. Since the region is warm and wet throughout the year, it has a luxuriant vegetation of all kinds – trees, shrubs,

and creepers giving it a multilayered structure. There is no definite time for trees to shed their leaves. As such, these forests appear green all the year round. Some of the commercially important trees of this forest are ebony, mahogany, rosewood, rubber and cinchona. The common animals found in these forests are elephants, monkey, lemur and deer. The one horned rhinoceros are found in the jungles of Assam and West Bengal. Besides these animals plenty of birds, bats, sloth, scorpions and snails are also found in these jungles.

#### Tropical Deciduous Forests

These are the most widespread forests of India. They are also called the monsoon forests and spread over the region receiving rainfall between 200 cm and 70 cm. Trees of this forest-type shed their leaves for about six to eight weeks in dry summer.

On the basis of the availability of water, these forests are further divided into moist and dry deciduous. The former is found in areas receiving rainfall between 200 and 100 cm. These forests exist, therefore, mostly in the eastern part of the country – northeastern states, along the foothills of the Himalayas, Jharkhand, West Orissa and Chhattisgarh, and on the eastern slopes of the Western Ghats. Teak is the most dominant species of this forest. Bamboos, sal, shisham, sandalwood, khair, kusum, arjun, mulberry are other commercially important species.

The dry deciduous forests are found in areas having rainfall between 100 cm and 70 cm. These forests are found in the rainier parts of the peninsular plateau and the plains of Bihar and Uttar Pradesh. There are open stretches in which Teak, Sal, Peepal, Neem grow. A large part of this region has been cleared for cultivation and some parts are used for grazing.

In these forests, the common animals found are lion, tiger, pig, deer and elephant. A huge variety of birds, lizards, snakes, and tortoises are also found here.

#### The Thorn Forests and Scrubs

In regions with less than 70 cm of rainfall, the natural vegetation consists of thorny trees and bushes. This type of vegetation is found in the north-western part of the country including semi-arid areas of Gujarat, Rajasthan, Madhya Pradesh, Chhattisgarh, Uttar Pradesh and Haryana. Acacias, palms, euphorbias and cacti are the main plant species. Trees are scattered and have long roots penetrating deep into the soil in order to get moisture.

The stems are succulent to conserve water. Leaves are mostly thick and small to minimize evaporation. These forests give way to thorn forests and scrubs in arid areas. In these forests, the common animals are rats, mice, rabbits, fox, wolf, tiger, lion, wild ass, horses and camels.

#### Montane Forests

In mountainous areas, the decrease in temperature with increasing altitude leads to the corresponding change in natural vegetation. As such, there is a succession of natural vegetation belts in the same order as we see from the tropical to the tundra region. The wet temperate type of forests are found between a height of 1000 and 2000 metres. Evergreen broad-leaf trees such as oaks and chestnuts predominate. Between 1500 and 3000 metres, temperate forests containing coniferous trees like pine, deodar, silver fir, spruce and cedar, are found. These forests cover mostly the southern slopes of the Himalayas, places having high altitude in southern and north-east India. At higher elevations, temperate grasslands are common.

At high altitudes, generally more than 3,600 metres



above sea-level, temperate forests and grasslands give way to the Alpine vegetation.

Silver fir, junipers, pines and birches are the common trees of these forests. However, they get progressively stunted as they approach the snow-line. Ultimately through shrubs and scrubs, they merge into the Alpine grasslands. These are used extensively for grazing by nomadic tribes like the Gujjars and the Bakarwals. At higher altitudes, mosses and lichens form part of tundra vegetation.

The common animals found in these forests are Kashmir stag, spotted deer, wild sheep, jack rabbit, Tibetan antelope, yak, snow leopard, squirrels, Shaggy horn wild ibex, bear and rare red panda, sheep and goats with thick hair.

### Mangrove Forests

The mangrove tidal forests are found in the areas of coasts influenced by tides. Mud and silt get accumulated on such coasts. Dense mangroves are the common varieties with roots of the plants submerged under water.

The deltas of the Ganga, the Mahanadi, the Krishana, the Godavari and the Kaveri are covered by such vegetation. In the Ganga-Brahmaputra delta, sundari trees are found, which provide durable hard timber. Palm, coconut, keora, agar, also grow in some parts of the delta. **Let us discuss:** What will happen if plants and animals disappear from the earth's surface? can the human beings survive under such a situation? Why is bio-diversity necessary and why should it be conserved?

### MEDICINAL PLANTS

India is known for its herbs and spices from ancient times. Some 2,000 plants have been described in Ayurveda and atleast 500 are in regular use. The World Conservation Union's Red list has named 352 medicinal plants of which 52 are critically threatened and 49 endangered. The commonly used plants in India are:

**Sarpagandha:** Used to treat blood pressure; it is found only in India.

**Jamun:** The juice from ripe fruit is used to prepare vinegar which is carminative and diuretic, and has digestive properties. The powder of the seed is used for controlling diabetes.

**Arjun:** The fresh juice of leaves is a cure for earache. It is also used to regulate blood pressure.

**Babool:** Leaves are used as a cure for eye sores. Its gum is used as a tonic.

**Neem:** Has high antibiotic and antibacterial properties.

**Tulsi Plant:** Is used to cure cough and cold.

**Kachnar:** Is used to cure asthma and ulcers. The buds and roots are good for digestive problems.

Identify more medicinal plants in your area. Which plants are used as medicines by local people to cure some diseases?

*Source: Medicinal Plants by Dr. S.K. Jain, 5th edition 1994, National Book Trust of India*

Royal Bengal Tiger is the famous animal in these forests. Turtles, crocodiles, gharials and snakes are also found in these forests.

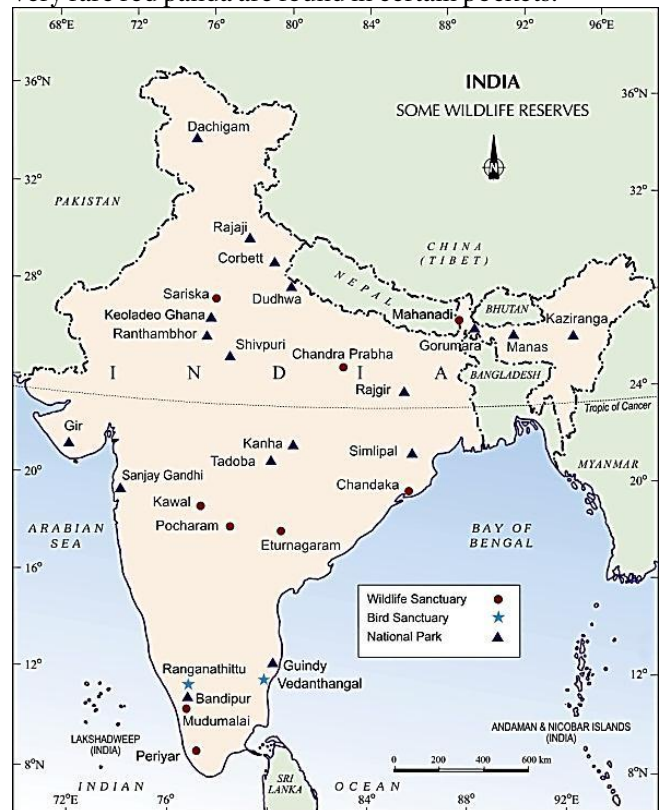
### WILD LIFE

Like its flora, India is also rich in its fauna. It has more than 89,000 of animal species. The country has more than 1200 species of birds. They constitute 13% of the world's total. There are 2500 species of fish, which account for nearly 12% of the world's stock. It also shares between 5 and 8 per cent of the world's amphibians, reptiles and mammals.

The elephants are the most majestic animals among the

mammals. They are found in the hot wet forests of Assam, Karnataka and Kerala. One-horned rhinoceroses are the other animals, which live in swampy and marshy lands of Assam and West Bengal. Arid areas of the Rann of Kachchh and the Thar Desert are the habitat for wild ass and camels respectively. Indian bison, nilgai (blue bull), chousingha (four horned antelope), gazel and different species of deer are some other animals found in India. It also has several species of monkeys.

**Do you know?** Wildlife Protection Act, was implemented in 1972 in India. India is the only country in the world that has both tigers and lions. The natural habitat of the Indian lion is the Gir forest in Gujarat. Tigers are found in the forests of Madhya Pradesh, the Sundarbans of West Bengal and the Himalayan region. Leopards too are members of the cat family. They are important among animals of prey. The Gir Forest is the last remaining habitat of the Asiatic Lion. The Himalayas harbour a hardy range of animals, which survive in extreme cold. Ladakh's freezing high altitudes are a home to yak, the shaggy horned wild ox weighing around one tonne, the Tibetan antelope, the bharal (blue sheep), wild sheep, and the kiang (Tibetan wild ass). Furthermore, the ibex, bear, snow-leopard and very rare red panda are found in certain pockets.



### Wildlife Reserves

The latter is the only representative of a variety of crocodile, found in the world today.

Bird life in India is colourful. Peacocks, pheasants, ducks, parakeets, cranes and pigeons are some of the birds inhabiting the forests and wetlands of the country.

We have selected our crops from a bio-diverse environment i.e. from the reserve of edible plants. We also experimented and selected many medicinal plants. The animals were selected from large stock provided by nature as milch animal. They also provided us draught power, transportation, meat, eggs. The fish provide nutritive food. Many insects help in pollination of crops and fruit trees and exert biological control on such insects, which are harmful. Every species has a role to play in the ecosystem.



Hence, conservation is essential. As has been mentioned earlier due to excessive exploitation of the plants and animal resources by human beings, the ecosystem has been disturbed. About 1,300 plant species are endangered and 20 species are extinct. Quite a few animal species are also endangered and some have become extinct.

The main causes for this major threat to nature are hunting by greedy hunters for commercial purposes. Pollution due to chemical and industrial waste, acid deposits, introduction of alien species and reckless cutting of the forests to bring land under cultivation and inhabitation, are also responsible for the imbalance. To protect the flora and fauna of the country, the government has taken many steps.

(i) Fourteen biosphere reserves have been set up in the country to protect flora and fauna. Four out of these, the Sunderbans in the West Bengal, Nanda Devi in Uttarakhand, the Gulf of Mannar in Tamil Nadu and the Nilgiris (Kerala, Karnataka and Tamil Nadu) have been included in the world network of Biosphere reserves.

(ii) Financial and technical assistance is provided to many Botanical Gardens by the government since 1992.

(iii) Project Tiger, Project Rhino, Project Great Indian Bustard and many other eco-developmental projects have been introduced.

(iv) 89 National Parks, 490 Wildlife sanctuaries and Zoological gardens are set up to take care of Natural heritage.

All of us must realise the importance of the natural ecosystem for our own survival. It is possible if indiscriminate destruction of natural environment is put to an immediate end.

**Important Terms** **Natural vegetation:** A plant community that has grown naturally without human aid is called natural vegetation. **Virgin vegetation:** Natural vegetation that has been left undisturbed by humans for a long time is called virgin vegetation. **Biodiversity:** Biodiversity in a region typically refers to its flora and fauna. **Endemic species:** Virgin vegetation that is purely Indian is known as endemic or indigenous species. **Exotic plants:** Plants that have come from outside India are termed exotic plants, like some species of orchids. **Flora:** Flora refers to the plants of a particular region or period. **Fauna:** Fauna is the collective term for the species of animals in a particular region or period. **Mangrove forests:** Mangrove forests are usually found in coastal areas. Dense mangrove forests are found in the deltas of the Ganga, Mahanadi, Godavari, Krishna and Kaveri. Wild animals such as the Royal Bengal Tiger, crocodile, gharial, turtle and snake are found here. **Biosphere Reserves:** It is a forest area where all types of flora and fauna are preserved in their natural environment, e.g., Nanda Devi. **National Parks:** They are relatively large areas where one or several ecosystems exist and where plants and animals species, geomorphological sites and habitats are of special educative and recreative interests, e.g., Jim Corbett Park. **Wildlife Sanctuary:** It is similar to national park but is dedicated to protect wildlife and conserve species, e.g., Gir Lion Sanctuary. **Biodiversity:** Biodiversity in a region typically refers to its flora and fauna. **Endemic species:** Virgin vegetation that is purely Indian is known as endemic or indigenous species. **Exotic plants:** Plants that have come from outside India are termed exotic plants, like some species of orchids.

## Chapter 6 Population

Human beings are producers and consumers of earth's resources. Therefore, it is important to know how many people are there in a country, where do they live, how and why their numbers are increasing and what are their characteristics. The census of India provides us with

information regarding the population of our country.

### Census

A census is an official enumeration of population done periodically. In India the first census was held in the year 1872. The first complete census, however was taken in the year 1881. Since then censuses have been held regularly every tenth year.

The Indian Census is the most comprehensive source of demographic, social and economic data. Have you ever seen a census report? Check in your library if it has one. We are primarily concerned with three major questions about the population:

(i) **Population size and distribution:** How many people are there and where are they located?

(ii) **Population growth and processes of population change:** How has the population grown and changed through time?

(iii) **Characteristics or qualities of the population:** What are their age, sex-composition, literacy levels, occupational structure and health conditions?

### POPULATION SIZE AND DISTRIBUTION

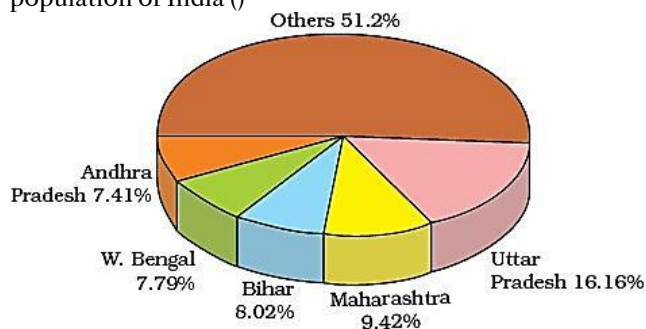
#### India's Population Size and Distribution by Numbers

India's population as on March 2001 stood at 1,028 million, which account for 16.7 per cent of the world's population. These 1.02 billion people are unevenly distributed over our country's vast area of 3.28 million square km, which accounts for 2.4 per cent of the world's area ()

The 2001 Census data reveals that Uttar Pradesh with a population size of 166 million people is the most populous state of India. Uttar Pradesh accounts for about 16 per cent of the country's population.

On the other hand, the Himalayan state Sikkim has a population of just about 0.5 million and Lakshadweep has only 60 thousand people.

Almost half of India's population lives in just five states. These are Uttar Pradesh, Maharashtra, Bihar, West Bengal, and Andhra Pradesh. Rajasthan, the biggest state in terms of area, has only 5.5 per cent of the total population of India ()



#### Distribution of Population

**Find Out:** What could be the reason of uneven distribution of population in India?

#### India's Population Distribution by Density

Population density provides a better picture of the uneven distribution. Population density is calculated as the number of persons per unit area. India is one of the most densely populated countries of the world.

**Do you know?** Only Bangladesh and Japan have higher average population densities than India. Find out the population densities of Bangladesh and Japan. The population density of India in the year 2001 was 324 persons per sq km. Densities vary from 904 persons per sq km in West Bengal to only 13 persons per sq km in Arunachal Pradesh. A study of the shows the pattern of uneven distribution of population densities at the state

level.

Note the states with population densities below 250 persons per square km. Rugged terrain and unfavourable climatic conditions are primarily responsible for sparse population in these areas. Which states have density below 100 persons per square km? Assam and most of the Peninsular states have moderate population densities. Hilly, dissected and rocky nature of the terrain, moderate to low rainfall, shallow and less fertile soils have influenced population densities in these areas.

The Northern Plains and Kerala in the south have high to very high population densities because of the flat plains with fertile soils and abundant rainfall. Identify the three states of the Northern Plains with high population densities.

### Population Growth and Processes of Population Change

Population is a dynamic phenomenon. The numbers, distribution and composition of the population are constantly changing. This is the influence of the interaction of the three processes, namely-births, deaths and migrations.

#### Population Growth

Growth of population refers to the change in the number of inhabitants of a country/territory during a specific period of time, say during the last ten years. Such a change can be expressed in two ways: in terms of absolute numbers and in terms of percentage change per year.

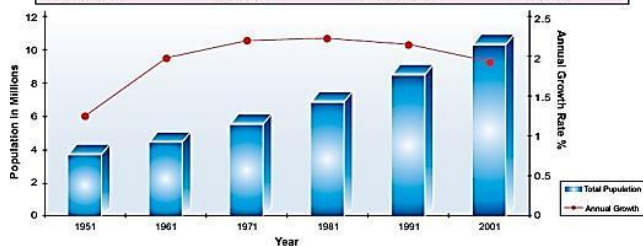
The absolute numbers added each year or decade is the magnitude of increase. It is obtained by simply subtracting the earlier population (e.g. that of 1991) from the later population (e.g. that of 2001). It is referred to as the absolute increase.

The rate or the pace of population increase is the other important aspect. It is studied in per cent per annum, e.g. a rate of increase of 2 per cent per annum means that in a given year, there was an increase of two persons for every 100 persons in the base population. This is referred to as the annual growth rate.

India's population has been steadily increasing from 361 million in 1951 to 1028 million in 2001.

Table 6.1 : The Magnitude and Rate of India's Population Growth

Year	Total Population (in millions)	Absolute Increase in the decade (in million)	Annual Growth Rate (%)
1951	361.0	42.43	1.25
1961	439.2	78.15	1.96
1971	548.2	108.92	2.20
1981	683.3	135.17	2.22
1991	846.4	163.09	2.14
2001	1028.7	182.32	1.93



India's Population and Population Growth Rates during 1951-2001

**Find Out** Table 6.1 and reveal that from 1951 to 1981, the annual rate of population growth was steadily increasing; which explains the rapid increase in population from 361 million in 1951 to 683 million in

1981.

• Table 6.1 reveals that despite the decline in growth rates, the number of people being added every decade is steadily increasing. Why?

Since 1981, however, the rate of growth started declining gradually. During this period, birth rates declined rapidly. Still 182 million people were added to the total population in the 1990s alone (an annual addition larger than ever before).

It is essential to realise that India has a very large population. When a low annual rate is applied to a very large population, it yields a large absolute increase. When more than a billion people increase even at a lower rate, the total numbers being added becomes very large. India's current annual increase in population of 15.5 million is large enough to neutralise efforts to conserve the resource endowment and environment. The declining trend of the growth rate is indeed a positive indicator of the efforts of birth control. Despite that, the total additions to the population base continue to grow, and India may overtake China in 2045 to become the most populous country in the world.

#### Processes of Population Change/Growth

There are three main processes of change of population: birth rates, death rates and migration.

The natural increase of population is the difference between birth rates and death rates.

**Birth rate** is the number of live births per thousand persons in a year. It is a major component of growth because in India, birth rates have always been higher than death rates.

**Death rate** is the number of deaths per thousand persons in a year. The main cause of the rate of growth of the Indian population has been the rapid decline in death rates.

Till 1980, high birth rates and declining death rates led to a large difference between birth rates and death rates resulting in higher rates of population growth. Since 1981, birth rates have also started declining gradually, resulting in a gradual decline in the rate of population growth. What are the reasons for this trend?

The third component of population growth is **migration**. Migration is the movement of people across regions and territories. Migration can be **internal** (within the country) or **international** (between the countries).

Internal migration does not change the size of the population, but influences the distribution of population within the nation. Migration plays a very significant role in changing the composition and distribution of population.

In India, most migrations have been from rural to urban areas because of the "push" factor in rural areas. These are adverse conditions of poverty and unemployment in the rural areas and the "pull" of the city in terms of increased employment opportunities and better living conditions.

Migration is an important determinant of population change. It changes not only the population size but also the population composition of urban and rural populations in terms of age and sex composition. In India, the rural-urban migration has resulted in a steady increase in the percentage of population in cities and towns. The urban population has increased from 17.29 per cent of the total population in 1951 to 27.78 per cent in 2001. There has been a significant increase in the number of 'million plus cities' from 23 to 35 in just one decade i.e. 1991 to 2001.

## Age Composition

The age composition of a population refers to the number of people in different age groups in a country. It is one of the most basic characteristics of a population. To an important degree, a person's age influences what he needs, buys, does and his capacity to perform. Consequently, the number and percentage of a population found within the children, working age and aged groups are notable determinants of the population's social and economic structure. The population of a nation is generally grouped into three broad categories:

### *Children (generally below 15 years)*

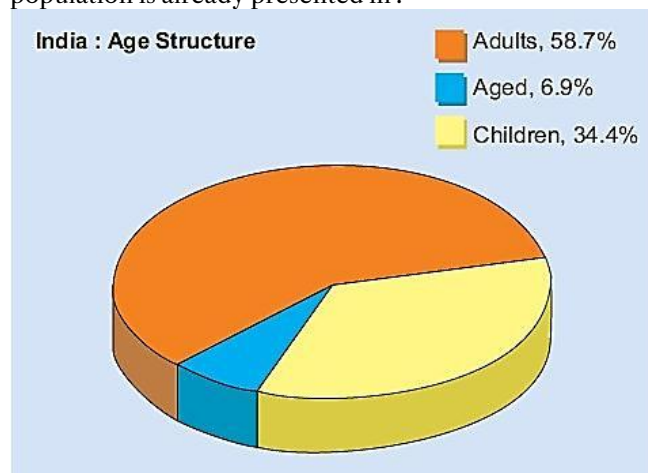
They are economically unproductive and need to be provided with food, clothing, education and medical care.

### *Working Age (15-59 years)*

They are economically productive and biologically reproductive. They comprise the working population.

### *Aged (Above 59 years)*

They can be economically productive though they may have retired. They may be working voluntarily but they are not available for employment through recruitment. The percentage of children and the aged affect the dependency ratio because these groups are not producers. The proportion of the three groups in India's population is already presented in .



India: Age Composition

## Sex Ratio

**Sex ratio** is defined as the number of females per 1000 males in the population. This information is an important social indicator to measure the extent of equality between males and females in a society at a given time. The sex ratio in the country has always remained unfavourable to females. Find out why this is so? Table 6.2 shows the sex ratio from 1951-2001.

Table 6.2 : India : Sex Ratio 1951-2001

Census year	Sex ratio (Females per 1000 males)
1951	946
1961	941
1971	930
1981	934
1991	929
2001	933

**Do you know?** Kerala has a sex ratio of 1058 females per 1000 males, Pondicherry has 1001 females for every 1000 males, while Delhi has only 821 females per 1000 males and Haryana has just 861.

**Find Out** What could be the reasons for such variations?

## Literacy Rates

**Literacy** is a very important quality of a population.

Obviously, only an informed and educated citizen can make intelligent choices and undertake research and development projects. Low levels of literacy are a serious obstacle for economic improvement. According to the Census of 2001, a person aged 7 years and above who can read and write with understanding in any language, is treated as **literate**.

There has been a steady improvement in the literacy levels in India. The literacy rate in the country as per the Census of 2001 is 64.84 per cent; 75.26 per cent for males and 53.67 per cent for females. Why do such differences exist?

## Occupational Structure

The percentage of population that is economically active is an important index of development. The distribution of the population according to different types of occupation is referred to as the **occupational structure**. An enormous variety of occupations are found in any country. Occupations are generally classified as primary, secondary, and tertiary.

**Primary** activities include agriculture, animal husbandry, forestry, fishing, mining and quarrying etc.

**Secondary** activities include manufacturing industry, building and construction work etc. **Tertiary** activities include transport, communications, commerce, administration and other services.

The proportion of people working in different activities varies in developed and developing countries.

Developed nations have a high proportion of people in secondary, and tertiary activities. Developing countries tend to have a higher proportion of their workforce engaged in primary activities. In India, about 64 per cent of the population is engaged only in agriculture. The proportion of population dependent on secondary and tertiary sectors is about 13 and 20 per cent respectively. There has been an occupational shift in favour of secondary and tertiary sectors because of growing industrialisation and urbanisation in recent times.

## Health

Health is an important component of population composition, which affects the process of development.

Sustained efforts of government programmes have registered significant improvements in the health conditions of the Indian population. Death rates have declined from 25 per 1000 population in 1951 to 8.1 per 1000 in 2001 and life expectancy at birth has increased from 36.7 years in 1951 to 64.6 years in 2001.

The substantial improvement is the result of many factors including improvement in public health, prevention of infectious diseases and application of modern medical practices in diagnosis and treatment of ailments.

Despite considerable achievements, the health situation is a matter of major concern for India. The per capita calorie consumption is much below the recommended levels and malnutrition afflicts a large percentage of our population. Safe drinking water and basic sanitation amenities are available to only one-third of the rural population. These problems need to be tackled through an appropriate population policy.

## Adolescent Population

The most significant feature of the Indian population is the size of its adolescent population. It constitutes one-fifth of the total population of India. Adolescents are generally grouped in the age-group of 10 to 19 years. They are the most important resource for the future. Nutrition requirements of adolescents are higher than



those of a normal child or adult. Poor nutrition can lead to deficiency and stunted growth. But in India, the diet available to adolescents is inadequate in all nutrients. A large number of adolescent girls suffer from anaemia. Their problems have so far not received adequate attention in the process of development. The adolescent girls have to be sensitised to the problems they confront. Their awareness can be improved through the spread of literacy and education among them.

### National Population Policy

Recognising that the planning of families would improve individual health and welfare, the Government of India initiated the comprehensive Family Planning Programme in 1952. The Family Welfare Programme has sought to promote responsible and planned parenthood on a voluntary basis. The National Population Policy 2000 is a culmination of years of planned efforts.

The NPP 2000 provides a policy framework for imparting free and compulsory school education up to 14 years of age, reducing infant mortality rate to below 30 per 1000 live births, achieving universal immunisation of children against all vaccine preventable diseases, promoting delayed marriage for girls, and making family welfare a people-centered programme.

### NPP 2000 and Adolescents

NPP 2000 identified adolescents as one of the major sections of the population that need greater attention. Besides nutritional requirements, the policy put greater emphasis on other important needs of adolescents including protection from unwanted pregnancies and sexually transmitted diseases (STD). It called for

programmes that aim towards encouraging delayed marriage and child-bearing, education of adolescents about the risks of unprotected sex, making contraceptive services accessible and affordable, providing food supplements, nutritional services, strengthening legal measures to prevent child marriage. People are the nation's most valuable resource. A well-educated healthy population provides potential power. that 'the King had enough on for both of us'

### Conclusion

Changes in styles of clothing are thus linked up with shifts in cultural tastes and notions of beauty, with changes within the economy and society, and with issues of social and political conflict. So when we see clothing styles alter we need to ask: why do these changes take place? What do they tell us about society and its history? What can they tell us about changes in tastes and technologies, markets and industries?

**Population growth:** The change in the number of inhabitants of a country during a specific period of time. **Annual growth rate:** The rate or pace of population increase. It is studied in per cent per annum. **Birth rate:** Birth rate is the number of live births per thousand persons in a year. **Death rate:** It is the number of deaths per thousand persons in a year. **Migration:** Migration is the movement of people across regions and territories. **Immigration:** When people come to a country, it is called immigration. **Emigration:** When people of a country leave that country, it is called emigration. **Million plus cities:** Cities with a population of more than one million or 10 lakh. **Sex ratio:** Sex ratio is defined as the number of females per thousand males in the population. **Dependency ratio:** Dependency ratio is the ratio of the dependent population to the working-age population of the country.

# NCERT Class 10

## Geography (Contemporary India 2)

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 Resources And Development

*Can you identify and name the various items used in making life comfortable in our villages and towns. List the items and name the material used in their making.*

Everything available in our environment which can be used to satisfy our needs, provided, it is technologically accessible, economically feasible and culturally acceptable can be termed as 'Resource'. The process of transformation of things available in our environment involves an inter- dependent relationship between nature, technology and institutions. Human beings interact with nature through technology and create institutions to accelerate their economic development. *Interdependent relationship between nature, technology and institutions*

Do you think that resources are free gifts of nature as is assumed by many? They are not. Resources are a function of human activities. Human beings themselves are essential components of resources. They transform material available in our environment into resources and use them. These resources can be classified in the following ways—

- (a) On the basis of origin – biotic and abiotic
- (b) On the basis of exhaustibility – renewable and non-renewable
- (c) On the basis of ownership – individual, community, national and international
- (d) On the basis of status of development –potential, developed stock and reserves.

#### Types Of Resources

##### On the Basis of Origin

**Biotic Resources:** These are obtained from biosphere and have life such as human beings, flora and fauna, fisheries, livestock etc.

**Abiotic Resources:** All those things which are composed of non-living things are called abiotic resources. For example, rocks and metals.

##### On the Basis of Exhaustibility

**Renewable Resources:** The resources which can be renewed or reproduced by physical, chemical or mechanical processes are known as renewable or replenishable resources. For example, solar and wind energy, water, forests and wildlife, etc. The renewable resource may further be divided into continuous or flow (Fig.1.2).

**Non-Renewable Resources:** These occur over a very long geological time. Minerals and fossil fuels are examples of such resources. These resources take millions of years in their formation. Some of the resources like metals are recyclable and some like fossil fuels cannot be recycled and get exhausted with their use.

##### On the Basis of Ownership

**Individual Resources:** These are also owned privately by individuals. Many farmers own land which is allotted

to them by government against the payment of revenue. In villages there are people with land ownership but there are many who are landless. Urban people own plots, houses and other property. Plantation, pasture lands, ponds, water in wells etc. are some of the examples of resources ownership by individuals. Make a list of resources owned by your household.

**Community Owned Resources:** There are resources which are accessible to all the members of the community. Village commons (grazing grounds, burial grounds, village ponds, etc.) public parks, picnic spots, playgrounds in urban areas are de facto accessible to all the people living there.

**National Resources:** Technically, all the resources belong to the nation. The country has legal powers to acquire even private property for public good. You might have seen roads, canals, railways being constructed on fields owned by some individuals. Urban Development Authorities get empowered by the government to acquire land. All the minerals, water resources, forests, wildlife, land within the political boundaries and oceanic area upto 12 nautical miles (19.2 km) from the coast termed as territorial water and resources therein belong to the nation.

**International Resources:** There are international institutions which regulate some resources. The oceanic resources beyond 200 nautical miles of the Exclusive Economic Zone belong to open ocean and no individual country can utilise these without the concurrence of international institutions.

##### On the Basis of the Status of Development

**Potential Resources:** Resources which are found in a region, but have not been utilised. For example, the western parts of India particularly Rajasthan and Gujarat have enormous potential for the development of wind and solar energy, but so far these have not been developed properly.

**Developed Resources:** Resources which are surveyed and their quality and quantity have been determined for utilisation. The development of resources depends on technology and level of their feasibility.

##### Do You Know

Do you know that India has got the right to mine manganese nodules from the bed of the Indian Ocean from that area which lies beyond the exclusive economic zone. Identify some other resources which are international in nature.

##### Development of Resources

Resources are vital for human survival as well as for maintaining the quality of life. It was believed that resources are free gifts of nature. As a result, human beings used them indiscriminately and this has led to the following major problems.

- Depletion of resources for satisfying the greed of few individuals.
- Accumulation of resources in few hands, which, in turn, divided the society into two segments i.e. haves and have nots or rich and poor.

- Indiscriminate exploitation of resources has led to global ecological crises such as, global warming, ozone layer depletion, environmental pollution and land degradation.

An equitable distribution of resources has become essential for a sustained quality of life and global peace. If the present trend of resource depletion by a few individuals and countries continues, the future of our planet is in danger.

Therefore, resource planning is essential for sustainable existence of all forms of life. Sustainable existence is a component of sustainable development.

### Resource Planning

Planning is the widely accepted strategy for judicious use of resources. It has importance in a country like India, which has enormous diversity in the availability of resources. There are regions which are rich in certain types of resources but are deficient in some other resources. There are some regions which can be considered self sufficient in terms of the availability of resources and there are some regions which have acute shortage of some vital resources. For example, the states of Jharkhand, Chhattisgarh and Madhya Pradesh are rich in minerals and coal deposits. Arunachal Pradesh has abundance of water resources but lacks in infrastructural development. The state of Rajasthan is very well endowed with solar and wind energy but lacks in water resources. The cold desert of Ladakh is relatively isolated from the rest of the country. It has very rich cultural heritage but it is deficient in water, infrastructure and some vital minerals. This calls for balanced resource planning at the national, state, regional and local levels.

### Sustainable development

*Sustainable economic development means 'development should take place without damaging the environment, and development in the present should not compromise with the needs of the future generations.'*

### Rio de Janeiro Earth Summit, 1992

*In June 1992, more than 100 heads of states met in Rio de Janeiro in Brazil, for the first International Earth Summit. The Summit was convened for addressing urgent problems of environmental protection and socio-economic development at the global level. The assembled leaders signed the Declaration on Global Climatic Change and Biological Diversity. The Rio Convention endorsed the global Forest Principles and adopted Agenda 21 for achieving Sustainable Development in the 21st century.*

### Agenda 21

*It is the declaration signed by world leaders in 1992 at the United Nations Conference on Environment and Development (UNCED), which took place at Rio de Janeiro, Brazil. It aims at achieving global sustainable development. It is an agenda to combat environmental damage, poverty, disease through global co-operation on common interests, mutual needs and shared responsibilities. One major objective of the Agenda 21 is that every local government should draw its own local Agenda 21.*

### Resource Planning in India

Resource planning is a complex process which involves: (i) identification and inventory of resources across the regions of the country. This involves surveying, mapping and qualitative and quantitative estimation and measurement of the resources. (ii) Evolving a planning structure endowed with appropriate technology, skill and institutional set up for implementing resource development plans. (iii) Matching the resource

development plans with overall national development plans.

India has made concerted efforts for achieving the goals of resource planning right from the First Five Year Plan launched after Independence.

The availability of resources is a necessary condition for the development of any region, but mere availability of resources in the absence of corresponding changes in technology and institutions may hinder development. There are many regions in our country that are rich in resources but these are included in economically backward regions. On the contrary there are some regions which have a poor resource base but they are economically developed.

The history of colonisation reveals that rich resources in colonies were the main attractions for the foreign invaders. It was primarily the higher level of technological development of the colonising countries that helped them to exploit resources of other regions and establish their supremacy over the colonies. Therefore, resources can contribute to development only when they are accompanied by appropriate technological development and institutional changes. India has experienced all this in different phases of colonisation. Therefore, in India, development, in general, and resource development in particular does not only involve the availability of resources, but also the technology, quality of human resources and the historical experiences of the people.

### Conservation of Resources:

Resources are vital for any developmental activity. But irrational consumption and over-utilisation of resources may lead to socio-economic and environmental problems. To overcome these problems, resource conservation at various levels is important. This had been the main concern of the leaders and thinkers in the past. For example, Gandhiji was very apt in voicing his concern about resource conservation in these words: "There is enough for everybody's need and not for anybody's greed." He placed the greedy and selfish individuals and exploitative nature of modern technology as the root cause for resource depletion at the global level. He was against mass production and wanted to replace it with the production by the masses. *At the international level, the Club of Rome advocated resource conservation for the first time in a more systematic way in 1968. Subsequently, in 1974, Gandhian philosophy was once again presented by Schumacher in his book Small is Beautiful. The seminal contribution with respect to resource conservation at the global level was made by the Brundtland Commission Report, 1987. This report introduced the concept of 'Sustainable Development' and advocated it as a means for resource conservation, which was subsequently published in a book entitled Our Common Future. Another significant contribution was made at the Earth Summit at Rio de Janeiro, Brazil in 1992.*

### Land Resources

We live on land, we perform our economic activities on land and we use it in different ways. Thus, land is a natural resource of utmost importance. It supports natural vegetation, wild life, human life, economic activities, transport and communication systems. However, land is an asset of a finite magnitude, therefore, it is important to use the available land for various purposes with careful planning. India has land under a variety of relief features, namely; mountains, plateaus, plains and islands. About 43 per cent of the land area is plain, which provides facilities



for agriculture and industry. Mountains account for 30 per cent of the total surface area of the country and ensure perennial flow of some rivers, provide facilities for tourism and ecological aspects. About 27 per cent of the area of the country is the plateau region. It possesses rich reserves of minerals, fossil fuels and forests.

### Land Utilisation

Land resources are used for the following purposes:

1. Forests
2. Land not available for cultivation
  - (a) Barren and waste land
  - (b) Land put to non-agricultural uses, e.g. buildings, roads, factories, etc.
3. Other uncultivated land (excluding fallow land)
  - (a) Permanent pastures and grazing land,
  - (b) Land under miscellaneous tree crops groves (not included in net sown area),
  - (c) Culturable waste land (left uncultivated for more than 5 agricultural years).
4. Fallow lands
  - (a) Current fallow-(left without cultivation for one or less than one agricultural year),
  - (b) Other than current fallow-(left uncultivated for the past 1 to 5 agricultural years).
5. Net sown area

Area sown more than once in an agricultural year plus net sown area is known as gross cropped area.

### Land Use Pattern in India

The use of land is determined both by physical factors such as topography, climate, soil types as well as human factors such as population density, technological capability and culture and traditions etc.

Total geographical area of India is 3.28 million sq km. Land use data, however, is available only for 93 per cent of the total geographical area because the land use reporting for most of the north-east states except Assam has not been done fully. Moreover, some areas of Jammu and Kashmir occupied by Pakistan and China have also not been surveyed.

The land under permanent pasture has also decreased. How are we able to feed our huge cattle population on this pasture land and what are the consequences of it? Most of the other than the current fallow lands are either of poor quality or the cost of cultivation of such land is very high. Hence, these lands are cultivated once or twice in about two to three years and if these are included in the net sown area then the percentage of NSA in India comes to about 54 per cent of the total reporting area.

The pattern of net sown area varies greatly from one state to another. It is over 80 per cent of the total area in Punjab and Haryana and less than 10 per cent in Arunachal Pradesh, Mizoram, Manipur and Andaman Nicobar Islands.

### Find out reasons for the low proportion of net sown area in these states.

Forest area in the country is far lower than the desired 33 per cent of geographical area, as it was outlined in the National Forest Policy (1952). It was considered essential for maintenance of the ecological balance. The livelihood of millions of people who live on the fringes of these forests depends upon it. A part of the land is termed as waste land and land put to other non-agricultural uses. Waste land includes rocky, arid and desert areas and land put to other non-agricultural uses includes settlements, roads, railways, industry etc. Continuous use of land over a long period of time without taking appropriate measures to conserve and manage it, has resulted in land degradation. This, in turn,

has serious repercussions on society and the environment.

### Land Degradation and Conservation Measures

We have shared our land with the past generations and will have to do so with the future generations too. Ninety-five per cent of our basic needs for food, shelter and clothing are obtained from land. Human activities have not only brought about degradation of land but have also aggravated the pace of natural forces to cause damage to land.

At present, there are about 130 million hectares of degraded land in India. Approximately, 28 per cent of it belongs to the category of forest degraded area, 56 per cent of it is water eroded area and the rest is affected by saline and alkaline deposits. Some human activities such as deforestation, over grazing, mining and quarrying too have contributed significantly in land degradation. Mining sites are abandoned after excavation work is complete leaving deep scars and traces of over-burdening. In states like Jharkhand, Chhattisgarh, Madhya Pradesh and Orissa deforestation due to mining have caused severe land degradation. In states like Gujarat, Rajasthan, Madhya Pradesh and Maharashtra overgrazing is one of the main reasons for land degradation. In the states of Punjab, Haryana, western Uttar Pradesh, over irrigation is responsible for land degradation due to water logging leading to increase in salinity and alkalinity in the soil. The mineral processing like grinding of limestone for cement industry and calcite and soapstone for ceramic industry generate huge quantity of dust in the atmosphere. It retards the process of infiltration of water into the soil after it settles down on the land. In recent years, industrial effluents as waste have become a major source of land and water pollution in many parts of the country.

There are many ways to solve the problems of land degradation. Afforestation and proper management of grazing can help to some extent. Planting of shelter belts of plants, control on over grazing, stabilisation of sand dunes by growing thorny bushes are some of the methods to check land degradation. Proper management of waste lands, control of mining activities, proper discharge and disposal of industrial effluents and wastes after treatment can reduce land and water degradation in industrial and suburban areas.

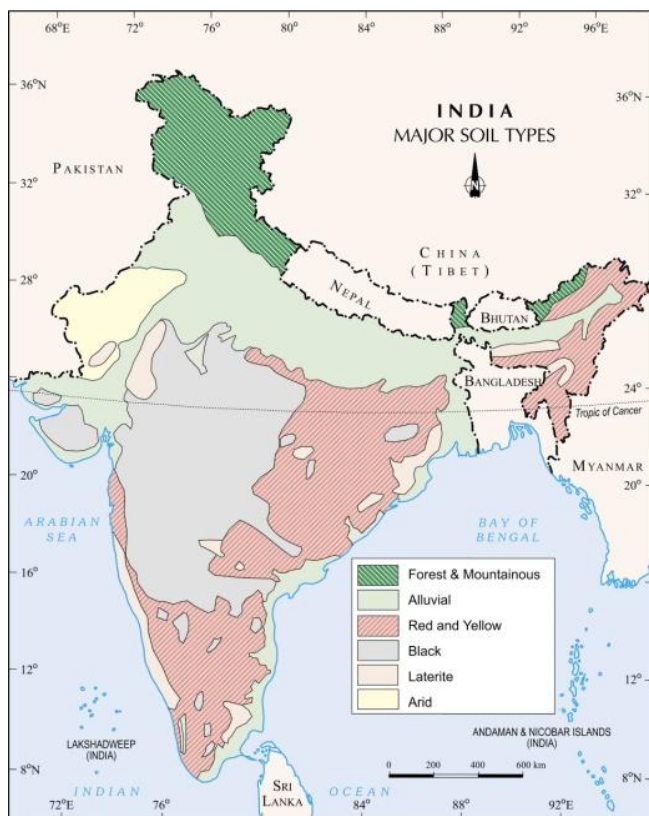
### Soil as a Resource

Soil is the most important renewable natural resource. It is the medium of plant growth and supports different types of living organisms on the earth. The soil is a living system. It takes millions of years to form soil upto a few cm in depth. Relief, parent rock or bed rock, climate, vegetation and other forms of life and time are important factors in the formation of soil. Various forces of nature such as change in temperature, actions of running water, wind and glaciers, activities of decomposers etc. contribute to the formation of soil. Chemical and organic changes which take place in the soil are equally important. Soil also consists of organic (humus) and inorganic materials.

On the basis of the factors responsible for soil formation, colour, thickness, texture, age, chemical and physical properties, the soils of India can be classified in different types.

### Classification of Soils

India has varied relief features, landforms, climatic realms and vegetation types. These have contributed in the development of various types of soils.



### Alluvial Soils

This is the most widely spread and important soil. In fact, the entire northern plains are made of alluvial soil. These have been deposited by three important Himalayan river systems— the Indus, the Ganga and the Brahmaputra. These soils also extend in Rajasthan and Gujarat through a narrow corridor. Alluvial soil is also found in the eastern coastal plains particularly in the deltas of the Mahanadi, the Godavari, the Krishna and the Kaveri rivers.

The alluvial soil consists of various proportions of sand, silt and clay. As we move inlands towards the river valleys, soil particles appear some what bigger in size. In the upper reaches of the river valley i.e. near the place of the break of slope, the soils are coarse. Such soils are more common in piedmont plains such as Duars, Chos and Terai.

Apart from the size of their grains or components, soils are also described on the basis of their age. According to their age alluvial soils can be classified as old alluvial (Bangar) and new alluvial (Khadar). The bangar soil has higher concentration of kanker nodules than the Khadar. It has more fine particles and is more fertile than the bangar.

Alluvial soils as a whole are very fertile. Mostly these soils contain adequate proportion of potash, phosphoric acid and lime which are ideal for the growth of sugarcane, paddy, wheat and other cereal and pulse crops. Due to its high fertility, regions of alluvial soils are intensively cultivated and densely populated. Soils in the drier areas are more alkaline and can be productive after proper treatment and irrigation.

### Black Soil

These soils are black in colour and are also known as regur soils. Black soil is ideal for growing cotton and is also known as black cotton soil. It is believed that climatic condition along with the parent rock material are the important factors for the formation of black soil. This type of soil is typical of the Deccan trap (Basalt) region spread over northwest Deccan plateau and is made up of lava flows. They cover the plateaus of

Maharashtra, Saurashtra, Malwa, Madhya Pradesh and Chhattisgarh and extend in the south east direction along the Godavari and the Krishna valleys. The black soils are made up of extremely fine i.e. clayey material. They are well-known for their capacity to hold moisture. In addition, they are rich in soil nutrients, such as calcium carbonate, magnesium, potash and lime. These soils are generally poor in phosphoric contents. They develop deep cracks during hot weather, which helps in the proper aeration of the soil. These soils are sticky when wet and difficult to work on unless tilled immediately after the first shower or during the pre-monsoon period.

### Red and Yellow Soils

Red soil develops on crystalline igneous rocks in areas of low rainfall in the eastern and southern parts of the Deccan plateau. Yellow and red soils are also found in parts of Orissa, Chhattisgarh, southern parts of the middle Ganga plain and along the piedmont zone of the Western Ghats. These soils develop a reddish colour due to diffusion of iron in crystalline and metamorphic rocks. It looks yellow when it occurs in a hydrated form.

### Laterite Soil

Laterite has been derived from the Latin word 'later' which means brick. The laterite soil develops in areas with high temperature and heavy rainfall. This is the result of intense leaching due to heavy rain. Humus content of the soil is low because most of the micro organisms, particularly the decomposers, like bacteria, get destroyed due to high temperature. Laterite soils are suitable for cultivation with adequate doses of manures and fertilizers.

These soils are mainly found in Karnataka, Kerala, Tamil Nadu, Madhya Pradesh, and the hilly areas of Orissa and Assam. After adopting appropriate soil conservation techniques particularly in the hilly areas of Karnataka, Kerala and Tamil Nadu, this soil is very useful for growing tea and coffee. Red laterite soils in Tamil Nadu, Andhra Pradesh and Kerala are more suitable for crops like cashew nut.

### Arid Soils

Arid soils range from red to brown in colour. They are generally sandy in texture and saline in nature. In some areas the salt content is very high and common salt is obtained by evaporating the water. Due to the dry climate, high temperature, evaporation is faster and the soil lacks humus and moisture. The lower horizons of the soil are occupied by Kankar because of the increasing calcium content downwards. The Kankar layer formations in the bottom horizons restrict the infiltration of water. After proper irrigation these soils become cultivable as has been in the case of western Rajasthan.

### Forest Soils

These soils are found in the hilly and mountainous areas where sufficient rain forests are available. The soils texture varies according to the mountain environment where they are formed. They are loamy and silty in valley sides and coarse grained in the upper slopes. In the snow covered areas of Himalayas, these soils experience denudation and are acidic with low humus content. The soils found in the lower parts of the valleys particularly on the river terraces and alluvial fans are fertile.

### Soil Erosion and Soil Conservation

The denudation of the soil cover and subsequent washing down is described as soil erosion. The processes of soil formation and erosion, go on simultaneously and generally there is a balance between

the two. Sometimes, this balance is disturbed due to human activities like deforestation, over-grazing, construction and mining etc., while natural forces like wind, glacier and water lead to soil erosion. The running water cuts through the clayey soils and makes deep channels as gullies. The land becomes unfit for cultivation and is known as bad land. In the Chambal basin such lands are called ravines. Sometimes water flows as a sheet over large areas down a slope. In such cases the top soil is washed away. This is known as sheet erosion. Wind blows loose soil off flat or sloping land known as wind erosion. Soil erosion is also caused due to defective methods of farming. Ploughing in a wrong way i.e. up and down the slope form channels for the quick flow of water leading to soil erosion. Ploughing along the contour lines can decelerate the flow of water down the slopes. This is called contour ploughing. Steps can be cut out on the slopes making terraces. Terrace cultivation restricts erosion. Western and central Himalayas have well developed terrace farming. Large fields can be divided into strips. Strips of grass are left to grow between the crops. This breaks up the force of the wind. This method is known as strip cropping. Planting lines of trees to create shelter also works in a similar way. Rows of such trees are called shelter belts. These shelter belts have contributed significantly to the stabilisation of sand dunes and in stabilising the desert in western India.

#### State of India's Environment

- *The village of Sukhomajri and the district of Jhabua have shown that it is possible to reverse land degradation. Tree density in Sukhomajri increased from 13 per hectare in 1976 to 1,272 per hectare in 1992;*
- *Regeneration of the environment leads to economic well-being, as a result of greater resource availability, improved agriculture and animal care, and consequently, increased incomes. Average annual household income in Sukhomajri ranged from Rs 10,000-15,000 between 1979 and 1984;*
- *People's management is essential for ecological restoration. With people being made the decision-makers by the Madhya Pradesh government, 2.9 million hectares or about 1 per cent of India's land area, are being greened across the state through watershed management.*

**Important Terms** **Gross cropped area:** Area sown more than once in an agricultural year plus net sown area is known as gross cropped area. **Fallow land:** A land, which is left without cultivation for one or less than one agricultural year for increasing its fertility is known as the fallow land. **Waste land:** Land, which is not suitable for cultivation is known as waste land. **Net sown area:** Area sown once in a year is known as the net sown area. **Pasture:** Grassland, which is used for providing food for animals. **Soil erosion:** The removal of top fertile soil cover due to various reasons such as wind, glacier and water is called soil erosion. **Gullies:** The running water cuts through the clayey soil and makes deep channels known as gullies. **Sheet erosion:** When the top soil is washed away due to heavy flow of water down the slopes, it is known as sheet erosion. **Wind erosion:** When the top fertile soil blows off due to wind, it is known as wind erosion. **Strip cropping:** Large fields can be divided into strips. Strips of grasses are left to grow between the crops. This breaks up the force of the wind. This method is known as strip cropping. **Contour ploughing:** Ploughing along the contour lines can slow down the flow of water down the slopes. This is called contour ploughing. **Shelter belts:** Planting lines of trees to create shelter breaks up the force of the wind. Rows of such trees are called shelter belts.

## Forest And Wild Life Resources

We share this planet with millions of other living beings, starting from micro-organisms and bacteria, lichens to banyan trees, elephants and blue whales. This entire habitat that we live in has immense biodiversity. We humans along with all living organisms form a complex web of ecological system in which we are only a part and very much dependent on this system for our own existence. For example, the plants, animals and micro-organisms re-create the quality of the air we breathe, the water we drink and the soil that produces our food without which we cannot survive. Forests play a key role in the ecological system as these are also the primary producers on which all other living beings depend.

#### Flora and Fauna in India

If you look around, you will be able to find that there are some animals and plants which are unique in your area. In fact, India is one of the world's richest countries in terms of its vast array of biological diversity, and has nearly 8 per cent of the total number of species in the world (estimated to be 1.6 million). This is possibly twice or thrice the number yet to be discovered. You have already studied in detail about the extent and variety of forest and wildlife resources in India. You may have realised the importance of these resources in our daily life. These diverse flora and fauna are so well integrated in our daily life that we take these for granted. But, lately, they are under great stress mainly due to insensitivity to our environment.

**Biodiversity or Biological Diversity** is immensely rich in wildlife and cultivated species, diverse in form and function but closely integrated in a system through multiple network of interdependencies.

Some estimates suggest that at least 10 per cent of India's recorded wild flora and 20 per cent of its mammals are on the threatened list. Many of these would now be categorised as 'critical', that is on the verge of extinction like the cheetah, pink-headed duck, mountain quail, forest spotted owl, and plants like madhuca insignis (a wild variety of mahua) and hubbardia heptaneuron, (a species of grass). In fact, no one can say how many species may have already been lost. Today, we only talk of the larger and more visible animals and plants that have become extinct but what about smaller animals like insects and plants?

#### Do You Know

Over 81,000 species of fauna and 47,000 species of flora are found in this country so far? Of the estimated 47,000 plant species, about 15,000 flowering species are endemic (indigenous) to India.

#### Vanishing Forests

*The dimensions of deforestation in India are staggering. The forest cover in the country is estimated at 637,293 sq km, which is 19.39 per cent of the total geographical area. (dense forest 11.48 per cent; open forest 7.76 per cent; and mangrove 0.15 per cent). According to the State of Forest Report (1999), the dense forest cover has increased by 10,098 sq km since 1997. However, this apparent increase in the forest cover is due to plantation by different agencies. The State of Forest Report does not differentiate between natural forests and plantations. Therefore, these reports fail to deliver accurate information about actual loss of natural forests.*

Let us now understand the different categories of existing plants and animal species. Based on the International Union for Conservation of Nature and Natural Resources (IUCN), we can classify as follows—



**Normal Species:** Species whose population levels are considered to be normal for their survival, such as cattle, sal, pine, rodents, etc.

**Endangered Species:** These are species which are in danger of extinction. The survival of such species is difficult if the negative factors that have led to a decline in their population continue to operate. The examples of such species are black buck, crocodile, Indian wild ass, Indian rhino, lion tailed macaque, sangai (brow antler deer in Manipur), etc.

**Vulnerable Species:** These are species whose population has declined to levels from where it is likely to move into the endangered category in the near future if the negative factors continue to operate. The examples of such species are blue sheep, Asiatic elephant, Gangetic dolphin, etc.

**Rare Species:** Species with small population may move into the endangered or vulnerable category if the negative factors affecting them continue to operate. The examples of such species are the Himalayan brown bear, wild Asiatic buffalo, desert fox and hornbill, etc.

**Endemic Species:** These are species which are only found in some particular areas usually isolated by natural or geographical barriers. Examples of such species are the Andaman teal, Nicobar pigeon, Andaman wild pig, mithun in Arunachal Pradesh.

**Extinct Species:** These are species which are not found after searches of known or likely areas where they may occur. A species may be extinct from a local area, region, country, continent or the entire earth. Examples of such species are the Asiatic cheetah, pink head duck.

### Do You Know

Do you know that among the larger animals in India, 79 species of mammals, 44 of birds, 15 of reptiles, and 3 of amphibians are threatened? Nearly 1,500 plant species are considered endangered. Flowering plants and vertebrate animals have recently become extinct at a rate estimated to be 50 to 100 times the average expected natural rate.

### What are the negative factors that cause such fearful depletion of the flora and fauna?

If you look around, you will be able to find out how we have transformed nature into a resource obtaining directly and indirectly from the forests and wildlife – wood, barks, leaves, rubber, medicines, dyes, food, fuel, fodder, manure, etc. So it is we ourselves who have depleted our forests and wildlife. The greatest damage inflicted on Indian forests was during the colonial period due to the expansion of the railways, agriculture, commercial and scientific forestry and mining activities. Even after Independence, agricultural expansion continues to be one of the major causes of depletion of forest resources. Between 1951 and 1980, according to the Forest Survey of India, over 26,200 sq. km. of forest area was converted into agricultural land all over India. Substantial parts of the tribal belts, especially in the north-eastern and central India, have been deforested or degraded by shifting cultivation (jhum), a type of 'slash and burn' agriculture.

### Asiatic Cheetah: where did they go?

*The world's fastest land mammal, the cheetah (Acinonyx jubantus), is a unique and specialised member of the cat family and can move at the speed of 112 km./hr. The cheetah is often mistaken for a leopard. Its distinguishing marks are the long teardrop-shaped lines on each side of the nose from the corner of its eyes to its mouth. Prior to the 20th century, cheetahs were widely distributed throughout Africa and Asia. Today,*

*the Asian cheetah is nearly extinct due to a decline of available habitat and prey. The species was declared extinct in India long back in 1952.*

Large-scale development projects have also contributed significantly to the loss of forests. Since 1951, over 5,000 sq km of forest was cleared for river valley projects. Clearing of forests is still continuing with projects like the Narmada Sagar Project in Madhya Pradesh, which would inundate 40,000 hectares of forest. Mining is another important factor behind deforestation. The Buxa Tiger Reserve in West Bengal is seriously threatened by the ongoing dolomite mining. It has disturbed the natural habitat of many species and blocked the migration route of several others, including the great Indian elephant.

Many foresters and environmentalists hold the view that the greatest degrading factors behind the depletion of forest resources are grazing and fuel-wood collection. Though, there may be some substance in their argument, yet, the fact remains that a substantial part of the fuel-fodder demand is met by lopping rather than by felling entire trees. The forest ecosystems are repositories of some of the country's most valuable forest products, minerals and other resources that meet the demands of the rapidly expanding industrial-urban economy. These protected areas, thus mean different things to different people, and therein lies the fertile ground for conflicts.

### Are colonial forest policies to be blamed?

*Some of our environmental activists say that the promotion of a few favoured species, in many parts of India, has been carried through the ironically-termed "enrichment plantation", in which a single commercially valuable species was extensively planted and other species eliminated. For instance, teak monoculture has damaged the natural forest in South India and Chir Pine (Pinus roxburghii) plantations in the Himalayas have replaced the Himalayan oak (Quercus spp.) and Rhododendron forests.*

Habitat destruction, hunting, poaching, over-exploitation, environmental pollution, poisoning and forest fires are factors, which have led to the decline in India's biodiversity. Other important causes of environmental destruction are unequal access, inequitable consumption of resources and differential sharing of responsibility for environmental well-being. Over-population in third world countries is often cited as the cause of environmental degradation. However, an average American consumes 40 times more resources than an average Somalian. Similarly, the richest five per cent of Indian society probably cause more ecological damage because of the amount they consume than the poorest 25 per cent. The former shares minimum responsibilities for environmental well-being. The question is: who is consuming what, from where and how much?

The destruction of forests and wildlife is not just a biological issue. The biological loss is strongly correlated with the loss of cultural diversity. Such losses have increasingly marginalised and impoverished many indigenous and other forest-dependent communities, who directly depend on various components of the forest and wildlife for food, drink, medicine, culture, spirituality, etc. Within the poor, women are affected more than men. In many societies, women bear the major responsibility of collection of fuel, fodder, water and other basic subsistence needs. As these resources are depleted, the drudgery of women increases and sometimes they have to walk for more than 10 km to

collect these resources. This causes serious health problems for women and negligence of home and children because of the increased hours of work, which often has serious social implications. The indirect impact of degradation such as severe drought or deforestation-induced floods, etc. also hits the poor the hardest. Poverty in these cases is a direct outcome of environmental destruction. Therefore, forest and wildlife, are vital to the quality of life and environment in the subcontinent. It is imperative to adapt to sound forest and wildlife conservation strategies.

### Do You Know

Do you know that over half of India's natural forests are gone, one-third of its wetlands drained out, 70 per cent of its surface water bodies polluted, 40 per cent of its mangroves wiped out, and with continued hunting and trade of wild animals and commercially valuable plants, thousands of plant and animal species are heading towards extinction?

### The Himalayan Yew in trouble

*The Himalayan Yew (Taxus wallachiana) is a medicinal plant found in various parts of Himachal Pradesh and Arunachal Pradesh. A chemical compound called 'taxol' is extracted from the bark, needles, twigs and roots of this tree, and it has been successfully used to treat some cancers – the drug is now the biggest selling anti-cancer drug in the world. The species is under great threat due to over-exploitation. In the last one decade, thousands of yew trees have dried up in various parts of Himachal Pradesh and Arunachal Pradesh.*

### Conservation of Forest and Wildlife in India

Conservation in the background of rapid decline in wildlife population and forestry has become essential. But why do we need to conserve our forests and wildlife? Conservation preserves the ecological diversity and our life support systems – water, air and soil. It also preserves the genetic diversity of plants and animals for better growth of species and breeding. For example, in agriculture, we are still dependent on traditional crop varieties. Fisheries too are heavily dependent on the maintenance of aquatic biodiversity. In the 1960s and 1970s, conservationists demanded a national wildlife protection programme. The Indian Wildlife (Protection) Act was implemented in 1972, with various provisions for protecting habitats. An all-India list of protected species was also published. The thrust of the programme was towards protecting the remaining population of certain endangered species by banning hunting, giving legal protection to their habitats, and restricting trade in wildlife. Subsequently, central and many state governments established national parks and wildlife sanctuaries about which you have already studied. The central government also announced several projects for protecting specific animals, which were gravely threatened, including the tiger, the one-horned rhinoceros, the Kashmir stag or hangul, three types of crocodiles – fresh water crocodile, saltwater crocodile and the Gharial, the Asiatic lion, and others. Most recently, the Indian elephant, black buck (chinkara), the great Indian bustard (godawan) and the snow leopard, etc. have been given full or partial legal protection against hunting and trade throughout India. The conservation projects are now focusing on biodiversity rather than on a few of its components. There is now a more intensive search for different conservation measures. Increasingly, even insects are beginning to find a place in conservation planning. In the notification under Wildlife Act of 1980 and 1986, several hundred butterflies, moths, beetles, and one

dragonfly have been added to the list of protected species. In 1991, for the first time plants were also added to the list, starting with six species.

### Types and Distribution of Forest and Wildlife Resources

Even if we want to conserve our vast forest and wildlife resources, it is rather difficult to manage, control and regulate them. In India, much of its forest and wildlife resources are either owned or managed by the government through the Forest Department or other government departments. These are classified under the following categories.

(i) **Reserved Forests:** More than half of the total forest land has been declared reserved forests. Reserved forests are regarded as the most valuable as far as the conservation of forest and wildlife resources are concerned.

(ii) **Protected Forests:** Almost one-third of the total forest area is protected forest, as declared by the Forest Department. This forest land are protected from any further depletion.

(iii) **Unclassed Forests:** These are other forests and wastelands belonging to both government and private individuals and communities.

Reserved and protected forests are also referred to as permanent forest estates maintained for the purpose of producing timber and other forest produce, and for protective reasons. Madhya Pradesh has the largest area under permanent forests, constituting 75 per cent of its total forest area. Jammu and Kashmir, Andhra Pradesh, Uttarakhand, Kerala, Tamil Nadu, West Bengal, and Maharashtra have large percentages of reserved forests of its total forest area whereas Bihar, Haryana, Punjab, Himachal Pradesh, Orissa and Rajasthan have a bulk of it under protected forests. All North-eastern states and parts of Gujarat have a very high percentage of their forests as unclassified forests managed by local communities.

### Project Tiger

*Tiger is one of the key wildlife species in the faunal web. In 1973, the authorities realised that the tiger population had dwindled to 1,827 from an estimated 55,000 at the turn of the century. The major threats to tiger population are numerous, such as poaching for trade, shrinking habitat, depletion of prey base species, growing human population, etc. The trade of tiger skins and the use of their bones in traditional medicines, especially in the Asian countries left the tiger population on the verge of extinction. Since India and Nepal provide habitat to about two-thirds of the surviving tiger population in the world, these two nations became prime targets for poaching and illegal trading.*

*"Project Tiger", one of the well-publicised wildlife campaigns in the world, was launched in 1973. Initially, it showed success as the tiger population went up to 4,002 in 1985 and 4,334 in 1989. But in 1993, the population of the tiger had dropped to 3,600. There are 27 tiger reserves in India covering an area of 37,761 sq km. Tiger conservation has been viewed not only as an effort to save an endangered species, but with equal importance as a means of preserving biotypes of sizeable magnitude. Corbett National Park in Uttaranchal, Sunderbans National Park in West Bengal, Bandhavgarh National Park in Madhya Pradesh, Sariska Wildlife Sanctuary in Rajasthan, Manas Tiger Reserve in Assam and Periyar Tiger Reserve in Kerala are some of the tiger reserves of India.*

### Community and Conservation

Conservation strategies are not new in our country. We

often ignore that in India, forests are also home to some of the traditional communities. In some areas of India, local communities are struggling to conserve these habitats along with government officials, recognising that only this will secure their own long-term livelihood. In Sariska Tiger Reserve, Rajasthan, villagers have fought against mining by citing the Wildlife Protection Act. In many areas, villagers themselves are protecting habitats and explicitly rejecting government involvement. The inhabitants of five villages in the Alwar district of Rajasthan have declared 1,200 hectares of forest as the Bhairondev Dakav 'Sonchuri', declaring their own set of rules and regulations which do not allow hunting, and are protecting the wildlife against any outside encroachments.

### **Sacred groves - a wealth of diverse and rare species**

*Nature worship is an age old tribal belief based on the premise that all creations of nature have to be protected. Such beliefs have preserved several virgin forests in pristine form called Sacred Groves (the forests of God and Goddesses). These patches of forest or parts of large forests have been left untouched by the local people and any interference with them is banned.*

*Certain societies revere a particular tree which they have preserved from time immemorial. The Mundas and the Santhals of Chhota Nagpur region worship mahua (*Bassia latifolia*) and kadamba (*Anthocaphalus cadamba*) trees, and the tribals of Orissa and Bihar worship the tamarind (*Tamarindus indica*) and mango (*Mangifera indica*) trees during weddings. To many of us, peepal and banyan trees are considered sacred.*

*Indian society comprises several cultures, each with its own set of traditional methods of conserving nature and its creations. Sacred qualities are often ascribed to springs, mountain peaks, plants and animals which are closely protected. You will find troops of macaques and langurs around many temples. They are fed daily and treated as a part of temple devotees. In and around Bishnoi villages in Rajasthan, herds of blackbuck, (chinkara), nilgai and peacocks can be seen as an integral part of the community and nobody harms them.*

The famous Chipko movement in the Himalayas has not only successfully resisted deforestation in several areas but has also shown that community afforestation with indigenous species can be enormously successful. Attempts to revive the traditional conservation methods or developing new methods of ecological farming are now widespread. Farmers and citizen's groups like the Beej Bachao Andolan in Tehri and Navdanya have shown that adequate levels of diversified crop production without the use of synthetic chemicals are possible and economically viable.

*"The tree is a peculiar organism of unlimited kindness and benevolence and makes no demand for its sustenance, and extends generously the products of its life activity. It affords protection to all beings, offering shade even to the axemen who destroy it".*  
*Gautama Buddha (487 B.C.)*

In India joint forest management (JFM) programme furnishes a good example for involving local communities in the management and restoration of degraded forests. The programme has been in formal existence since 1988 when the state of Orissa passed the first resolution for joint forest management. JFM depends on the formation of local (village) institutions that undertake protection activities mostly on degraded forest land managed by the forest department. In return, the members of these communities are entitled to

intermediary benefits like non-timber forest products and share in the timber harvested by 'successful protection'.

The clear lesson from the dynamics of both environmental destruction and reconstruction in India is that local communities everywhere have to be involved in some kind of natural resource management. But there is still a long way to go before local communities are at the centre-stage in decision-making. Accept only those economic or developmental activities, that are people centric, environment-friendly and economically rewarding.

## **Chapter 3 Water Resources**

You already know that three-fourth of the earth's surface is covered with water, but only a small proportion of it accounts for freshwater that can be put to use. This freshwater is mainly obtained from surface run off and ground water that is continually being renewed and recharged through the hydrological cycle. All water moves within the hydrological cycle ensuring that water is a renewable resource.

You might wonder that if three-fourth of the world is covered with water and water is a renewable resource, then how is it that countries and regions around the globe suffer from water scarcity?

Why is it predicted that by 2025, nearly two billion people will live in absolute water scarcity?

### **Water: Some facts and figures**

- 96.5 per cent of the total volume of world's water is estimated to exist as oceans and only 2.5 per cent as freshwater. Nearly 70 per cent of this freshwater occurs as ice sheets and glaciers in Antarctica, Greenland and the mountainous regions of the world, while a little less than 30 per cent is stored as groundwater in the world's aquifers.

- India receives nearly 4 per cent of the global precipitation and ranks 133 in the world in terms of water availability per person per annum.

- The total renewable water resources of India are estimated at 1,897 sq km per annum.

- By 2025, it is predicted that large parts of India will join countries or regions having absolute water scarcity.

### **Water Scarcity and the Need for Water**

#### **Conservation and Management**

Given the abundance and renewability of water, it is difficult to imagine that we may suffer from water scarcity. The moment we speak of water shortages, we immediately associate it with regions having low rainfall or those that are drought prone. We instantaneously visualise the deserts of Rajasthan and women balancing many 'matkas' (earthen pots) used for collecting and storing water and travelling long distances to get water. True, the availability of water resources varies over space and time, mainly due to the variations in seasonal and annual precipitation, but water scarcity in most cases is caused by over-exploitation, excessive use and unequal access to water among different social groups. According to Falkenmark, a Swedish expert, water stress occurs when water availability is between 1,000 and 1,600 cubic metre per person per year.

Where is then water scarcity likely to occur? As you have read in the hydrological cycle, freshwater can be obtained directly from precipitation, surface run off and groundwater.

Is it possible that an area or region may have ample



water resources but is still facing water scarcity? Many of our cities are such examples. Thus, water scarcity may be an outcome of large and growing population and consequent greater demands for water, and unequal access to it. A large population means more water not only for domestic use but also to produce more food. Hence, to facilitate higher food-grain production, water resources are being over-exploited to expand irrigated areas and dry-season agriculture. You may have seen in many television advertisements that most farmers have their own wells and tube-wells in their farms for irrigation to increase their produce. But have you ever wondered what this could result in? That it may lead to falling groundwater levels, adversely affecting water availability and food security of the people. Post-independent India witnessed intensive industrialisation and urbanisation, creating vast opportunities for us. Today, large industrial houses are as commonplace as the industrial units of many MNCs (Multinational Corporations). The ever-increasing number of industries has made matters worse by exerting pressure on existing freshwater resources. Industries, apart from being heavy users of water, also require power to run them. Much of this energy comes from hydroelectric power. Today, in India hydroelectric power contributes approximately 22 per cent of the total electricity produced. Moreover, multiplying urban centres with large and dense populations and urban lifestyles have not only added to water and energy requirements but have further aggravated the problem. If you look into the housing societies or colonies in the cities, you would find that most of these have their own groundwater pumping devices to meet their water needs. Not surprisingly, we find that fragile water resources are being over-exploited and have caused their depletion in several of these cities.

So far we have focused on the quantitative aspects of water scarcity. Now, let us consider another situation where water is sufficiently available to meet the needs of the people, but, the area still suffers from water scarcity. This scarcity may be due to bad quality of water. Lately, there has been a growing concern that even if there is ample water to meet the needs of the people, much of it may be polluted by domestic and industrial wastes, chemicals, pesticides and fertilisers used in agriculture, thus, making it hazardous for human use.

India's rivers, especially the smaller ones, have all turned into toxic streams. And even the big ones like the Ganga and Yamuna are far from being pure. The assault on India's rivers – from population growth, agricultural modernisation, urbanisation and industrialisation – is enormous and growing by the day..... This entire life stands threatened.

### **Multi-purpose River Projects and Integrated Water Resources Management**

But, how do we conserve and manage water? Archaeological and historical records show that from ancient times we have been constructing sophisticated hydraulic structures like dams built of stone rubble, reservoirs or lakes, embankments and canals for irrigation. Not surprisingly, we have continued this tradition in modern India by building dams in most of our river basins.

### **Hydraulic Structures in Ancient India**

What are dams and how do they help us in conserving and managing water? Dams were traditionally built to impound rivers and rainwater that could be used later to

irrigate agricultural fields. Today, dams are built not just for irrigation but for electricity generation, water supply for domestic and industrial uses, flood control, recreation, inland navigation and fish breeding. Hence, dams are now referred to as multi-purpose projects where the many uses of the impounded water are integrated with one another. For example, in the Sutluj-Beas river basin, the Bhakra – Nangal project water is being used both for hydel power production and irrigation. Similarly, the Hirakud project in the Mahanadi basin integrates conservation of water with flood control.

*A dam is a barrier across flowing water that obstructs, directs or retards the flow, often creating a reservoir, lake or impoundment. "Dam" refers to the reservoir rather than the structure. Most dams have a section called a spillway or weir over which or through which it is intended that water will flow either intermittently or continuously. Dams are classified according to structure, intended purpose or height. Based on structure and the materials used, dams are classified as timber dams, embankment dams or masonry dams, with several subtypes. According to the height, dams can be categorised as large dams and major dams or alternatively as low dams, medium height dams and high dams.*

Multi-purpose projects, launched after Independence with their integrated water resources management approach, were thought of as the vehicle that would lead the nation to development and progress, overcoming the handicap of its colonial past. Jawaharlal Nehru proudly proclaimed the dams as the 'temples of modern India'; the reason being that it would integrate development of agriculture and the village economy with rapid industrialisation and growth of the urban economy.

In recent years, multi-purpose projects and large dams have come under great scrutiny and opposition for a variety of reasons. Regulating and damming of rivers affect their natural flow causing poor sediment flow and excessive sedimentation at the bottom of the reservoir, resulting in rockier stream beds and poorer habitats for the rivers' aquatic life. Dams also fragment rivers making it difficult for aquatic fauna to migrate, especially for spawning. The reservoirs that are created on the floodplains also submerge the existing vegetation and soil leading to its decomposition over a period of time. Multi-purpose projects and large dams have also been the cause of many new social movements like the 'Narmada Bachao Andolan' and the 'Tehri Dam Andolan' etc. Resistance to these projects has primarily been due to the large-scale displacement of local communities. Local people often had to give up their land, livelihood and their meagre access and control over resources for the greater good of the nation. So, if the local people are not benefiting from such projects then who is benefited? Perhaps, the landowners and large farmers, industrialists and few urban centres. Take the case of the landless in a village – does he really gain from such a project?

*Narmada Bachao Andolan or Save Narmada Movement is a Non Governmental Organisation (NGO) that mobilised tribal people, farmers, environmentalists and human rights activists against the Sardar Sarovar Dam being built across the Narmada river in Gujarat. It originally focused on the environmental issues related to trees that would be submerged under the dam water. Recently it has re-focused the aim to enable poor citizens, especially the oustees (displaced people) to get*

full rehabilitation facilities from the government. People felt that their suffering would not be in vain... accepted the trauma of displacement believing in the promise of irrigated fields and plentiful harvests. So, often the survivors of Rihand told us that they accepted their sufferings as sacrifice for the sake of their nation. But now, after thirty bitter years of being adrift, their livelihood having even being more precarious, they keep asking: "Are we the only ones chosen to make sacrifices for the nation?"

Irrigation has also changed the cropping pattern of many regions with farmers shifting to water intensive and commercial crops. This has great ecological

consequences like salinisation of the soil. At the same time, it has transformed the social landscape i.e. increasing the social gap between the richer landowners and the landless poor. As we can see, the dams did create conflicts between people wanting different uses and benefits from the same water resources. In Gujarat, the Sabarmati-basin farmers were agitated and almost caused a riot over the higher priority given to water supply in urban areas, particularly during droughts. Inter-state water disputes are also becoming common with regard to sharing the costs and benefits of the multi-purpose project.



India: Major Rivers and Dams

### Do You Know

Do you know that the Krishna-Godavari dispute is due to the objections raised by Karnataka and Andhra Pradesh governments? It is regarding the diversion of more water at Koyna by the Maharashtra government for a multipurpose project. This would reduce downstream flow in their states with adverse

consequences for agriculture and industry. Most of the objections to the projects arose due to their failure to achieve the purposes for which they were built. Ironically, the dams that were constructed to control floods have triggered floods due to sedimentation in the reservoir. Moreover, the big dams have mostly been unsuccessful in controlling floods at

the time of excessive rainfall. You may have seen or read how the release of water from dams during heavy rains aggravated the flood situation in Maharashtra and Gujarat in 2006. The floods have not only devastated life and property but also caused extensive soil erosion. Sedimentation also meant that the flood plains were deprived of silt, a natural fertiliser, further adding on to the problem of land degradation. It was also observed that the multi-purpose projects induced earthquakes, caused water-borne diseases and pests and pollution resulting from excessive use of water.

### Rainwater Harvesting

Many thought that given the disadvantages and rising resistance against the multi-purpose projects, water harvesting system was a viable alternative, both socio-economically and environmentally. In ancient India, along with the sophisticated hydraulic structures, there existed an extraordinary tradition of water-harvesting system. People had in-depth knowledge of rainfall regimes and soil types and developed wide ranging techniques to harvest rainwater, groundwater, river water and flood water in keeping with the local ecological conditions and their water needs. In hill and mountainous regions, people built diversion channels like the 'guls' or 'kuls' of the Western Himalayas for agriculture. 'Rooftop rain water harvesting' was commonly practised to store drinking water, particularly in Rajasthan. In the flood plains of Bengal, people developed inundation channels to irrigate their fields. In arid and semi-arid regions, agricultural fields were converted into rain fed storage structures that allowed the water to stand and moisten the soil like the 'khadins' in Jaisalmer and 'Johads' in other parts of Rajasthan.

- *Rooftop rain water is collected using a PVC pipe*
- *Filtered using sand and bricks*
- *Underground pipe takes water to sump for immediate usage*
- *Excess water from the sump is taken to the well*
- *Water from the well recharges the underground*
- *Take water from the well (later)*

### Interesting Fact

*Rooftop rain water harvesting is the most common practice in Shillong, Meghalaya. It is interesting because Cherapunjee and Mawsynram situated at a distance of 55 km. from Shillong receive the highest rainfall in the world, yet the state capital Shillong faces acute shortage of water. Nearly every household in the city has a rooftop rain water harvesting structure. Nearly 15-25 per cent of the total water requirement of the household comes from rooftop water harvesting.*

Rooftop harvesting was common across the towns and villages of the Thar. Rainwater that falls on the sloping roofs of houses is taken through a pipe into an underground tanka (circular holes in the ground), built in the main house or in the courtyard. The picture above shows water being from a neighbour's roof through a long pipe. Here the neighbour's rooftop has been used for collection of rainwater. The picture shows a hole through which rainwater flows down into an underground tanka.

In the semi-arid and arid regions of Rajasthan, particularly in Bikaner, Phalodi and Barmer, almost all the houses traditionally had underground tanks or tankas for storing drinking water. The tanks could be as large as a big room; one household in Phalodi had a tank that was 6.1 metres deep, 4.27 metres long and 2.44 metres wide. The tankas were part of the well-

developed rooftop rainwater harvesting system and were built inside the main house or the courtyard. They were connected to the sloping roofs of the houses through a pipe. Rain falling on the rooftops would travel down the pipe and was stored in these underground 'tankas'. The first spell of rain was usually not collected as this would clean the roofs and the pipes. The rainwater from the subsequent showers was then collected.

The rainwater can be stored in the tankas till the next rainfall making it an extremely reliable source of drinking water when all other sources are dried up, particularly in the summers. Rainwater, or palar pani, as commonly referred to in these parts, is considered the purest form of natural water. Many houses constructed underground rooms adjoining the 'tanka' to beat the summer heat as it would keep the room cool.

Today, in western Rajasthan, sadly the practice of rooftop rainwater harvesting is on the decline as plenty of water is available due to the perennial Rajasthan Canal, though some houses still maintain the tankas since they do not like the taste of tap water. Fortunately, in many parts of rural and urban India, rooftop rainwater harvesting is being successfully adapted to store and conserve water. In Gendathur, a remote backward village in Mysore, Karnataka, villagers have installed, in their household's rooftop, rainwater harvesting system to meet their water needs. Nearly 200 households have installed this system and the village has earned the rare distinction of being rich in rainwater. See for a better understanding of the rooftop rainwater harvesting system which is adapted here. Gendathur receives an annual precipitation of 1,000 mm, and with 80 per cent of collection efficiency and of about 10 fillings, every house can collect and use about 50,000 litres of water annually. From the 20 houses, the net amount of rainwater harvested annually amounts to 1,00,000 litres.

### Interesting Fact

*Tamil Nadu is the first and the only state in India which has made rooftop rainwater harvesting structure compulsory to all the houses across the state. There are legal provisions to punish the defaulters.*

### Bamboo Drip Irrigation System

*In Meghalaya, a 200-year-old system of tapping stream and spring water by using bamboo pipes, is prevalent. About 18-20 litres of water enters the bamboo pipe system, gets transported over hundreds of metres, and finally reduces to 20-80 drops per minute at the site of the plant.*

**Aquifer:** A layer of rock or soil which can absorb and hold water. **Guls or Kuls:** In hilly and mountainous regions, people build diversion channels like the 'Guls' or 'Kuls' of Western Himalayas for agriculture.

**Inundation canal:** It is meant to direct flood waters during the rainy season. **Drip irrigation:** It is a type of irrigation in which water gets dropped in the form of drips close to roots of the plants in order to conserve the moisture. **Surface runoff:** This is the water flow that occurs when the soil is infiltrated to full capacity and excess water from rain, melted snow or other sources flows over the land.

## Chapter 4 Agriculture

India is an agriculturally important country. Two-thirds of its population is engaged in agricultural activities. Agriculture is a primary activity, which produces most



of the food that we consume. Besides food grains, it also produces raw material for various industries.

**Can you name some industries based on agricultural raw material?**

Moreover, some agricultural products like tea, coffee, spices, etc. are also exported.

**Types of Farming**

Agriculture is an age-old economic activity in our country. Over these years, cultivation methods have changed significantly depending upon the characteristics of physical environment, technological know-how and socio-cultural practices. Farming varies from subsistence to commercial type. At present, in different parts of India, the following farming systems are practised.

**Primitive Subsistence Farming**

This type of farming is still practised in few pockets of India. Primitive subsistence agriculture is practised on small patches of land with the help of primitive tools like hoe, dao and digging sticks, and family/community labour. This type of farming depends upon monsoon, natural fertility of the soil and suitability of other environmental conditions to the crops grown.

It is a 'slash and burn' agriculture. Farmers clear a patch of land and produce cereals and other food crops to sustain their family. When the soil fertility decreases, the farmers shift and clear a fresh patch of land for cultivation. This type of shifting allows Nature to replenish the fertility of the soil through natural processes; land productivity in this type of agriculture is low as the farmer does not use fertilisers or other modern inputs. It is known by different names in different parts of the country.

**Can you name some such types of farmings?**

It is jhumming in north-eastern states like Assam, Meghalaya, Mizoram and Nagaland; Pamlou in Manipur, Dipa in Bastar district of Chhattishgarh, and in Andaman and Nicobar Islands.

**Jhumming:** *The 'slash and burn' agriculture is known as 'Milpa' in Mexico and Central America, 'Conuco' in Venezuela, 'Roca' in Brazil, 'Masole' in Central Africa, 'Ladang' in Indonesia, 'Ray' in Vietnam.*

*In India, this primitive form of cultivation is called 'Bewar' or 'Dahiya' in Madhya Pradesh, 'Podu' or 'Penda' in Andhra Pradesh, 'Pama Dabi' or 'Koman' or 'Bringa' in Orissa, 'Kumari' in Western Ghats, 'Valre' or 'Waltre' in South-eastern Rajasthan, 'Khil' in the Himalayan belt, 'Kuruwa' in Jharkhand, and 'Jhumming' in the North-eastern region.*

*Rinjha lived with her family in a small village at the outskirts of Diphu in Assam. She enjoys watching her family members clearing, slashing and burning a patch of land for cultivation. She often helps them in irrigating the fields with water running through a bamboo canal from the nearby spring. She loves the surroundings and wants to stay here as long as she can, but this little girl has no idea about the declining fertility of the soil and her family's search for fresh a patch of land in the next season.*

**Intensive Subsistence Farming**

This type of farming is practised in areas of high population pressure on land. It is labour-intensive farming, where high doses of biochemical inputs and irrigation are used for obtaining higher production.

**Can you name some of the states of India where such farming is practised?**

Though the 'right of inheritance' leading to the division of land among successive generations has rendered land-holding size uneconomical, the farmers continue

to take maximum output from the limited land in the absence of alternative source of livelihood. Thus, there is enormous pressure on agricultural land.

**Commercial Farming**

The main characteristic of this type of farming is the use of higher doses of modern inputs, e.g. high yielding variety (HYV) seeds, chemical fertilisers, insecticides and pesticides in order to obtain higher productivity. The degree of commercialisation of agriculture varies from one region to another. For example, rice is a commercial crop in Haryana and Punjab, but in Orissa, it is a subsistence crop.

**Can you give some more examples of crops which may be commercial in one region and may provide subsistence in another region?**

Plantation is also a type of commercial farming. In this type of farming, a single crop is grown on a large area. The plantation has an interface of agriculture and industry. Plantations cover large tracts of land, using capital intensive inputs, with the help of migrant labourers. All the produce is used as raw material in respective industries.

In India, tea, coffee, rubber, sugarcane, banana, etc.. are important plantation crops. Tea in Assam and North Bengal coffee in Karnataka are some of the important plantation crops grown in these states. Since the production is mainly for market, a well-developed network of transport and communication connecting the plantation areas, processing industries and markets plays an important role in the development of plantations.

**Cropping Pattern**

You have studied the physical diversities and plurality of cultures in India. These are also reflected in agricultural practices and cropping patterns in the country. Various types of food and fibre crops, vegetables and fruits, spices and condiments, etc.. constitute some of the important crops grown in the country. India has three cropping seasons — rabi, kharif and zaid.

Rabi crops are sown in winter from October to December and harvested in summer from April to June. Some of the important rabi crops are wheat, barley, peas, gram and mustard. Though, these crops are grown in large parts of India, states from the north and north-western parts such as Punjab, Haryana, Himachal Pradesh, Jammu and Kashmir, Uttarakhand and Uttar Pradesh are important for the production of wheat and other rabi crops. Availability of precipitation during winter months due to the western temperate cyclones helps in the success of these crops. However, the success of the green revolution in Punjab, Haryana, western Uttar Pradesh and parts of Rajasthan has also been an important factor in the growth of the above-mentioned rabi crops.

Kharif crops are grown with the onset of monsoon in different parts of the country and these are harvested in September-October. Important crops grown during this season are paddy, maize, jowar, bajra, tur (arhar), moong, urad, cotton, jute, groundnut and soyabean. Some of the most important rice-growing regions are Assam, West Bengal, coastal regions of Orissa, Andhra Pradesh, Tamil Nadu, Kerala and Maharashtra, particularly the (Konkan coast) along with Uttar Pradesh and Bihar. Recently, paddy has also become an important crop of Punjab and Haryana. In states like Assam, West Bengal and Orissa, three crops of paddy are grown in a year. These are Aus, Aman and Boro. In between the rabi and the kharif seasons, there is a short season during the summer months known as the

Zaid season. Some of the crops produced during 'zaid' are watermelon, muskmelon, cucumber, vegetables and fodder crops. Sugarcane takes almost a year to grow.

### Major Crops

A variety of food and non food crops are grown in different parts of the country depending upon the variations in soil, climate and cultivation practices. Major crops grown in India are rice, wheat, millets, pulses, tea, coffee, sugarcane, oil seeds, cotton and jute, etc.

**Rice:** It is the staple food crop of a majority of the people in India. Our country is the second largest producer of rice in the world after China. It is a kharif crop which requires high temperature, (above 25°C) and high humidity with annual rainfall above 100 cm. In the areas of less rainfall, it grows with the help of irrigation. Rice is grown in the plains of north and north-eastern India, coastal areas and the deltaic regions.

Development of dense network of canal irrigation and tubewells have made it possible to grow rice in areas of less rainfall such as Punjab, Haryana and western Uttar Pradesh and parts of Rajasthan.

**Wheat:** This is the second most important cereal crop. It is the main food crop, in north and north-western part of the country. This rabi crop requires a cool growing season and a bright sunshine at the time of ripening. It requires 50 to 75 cm of annual rainfall evenly-distributed over the growing season. There are two important wheat-growing zones in the country – the Ganga-Satluj plains in the north-west and black soil region of the Deccan. The major wheat-producing states are Punjab, Haryana, Uttar Pradesh, Bihar, Rajasthan and parts of Madhya Pradesh.

**Millets:** Jowar, bajra and ragi are the important millets grown in India. Though, these are known as coarse grains, they have very high nutritional value. For example, ragi is very rich in iron, calcium, other micro nutrients and roughage. Jowar is the third most important food crop with respect to area and production. It is a rain-fed crop mostly grown in the moist areas which hardly needs irrigation. Maharashtra is the largest producer of jowar followed by Karnataka, Andhra Pradesh and Madhya Pradesh.

Bajra grows well on sandy soils and shallow black soil. Rajasthan is the largest producer of bajra followed by Uttar Pradesh, Maharashtra, Gujarat and Haryana. Ragi is a crop of dry regions and grows well on red, black, sandy, loamy and shallow black soils. Karnataka is the largest producer of ragi followed by Tamil Nadu. Apart from these states, Himachal Pradesh, Uttarakhand, Sikkim, Jharkhand and Arunachal Pradesh are also important for the production of ragi.

**Maize:** It is a crop which is used both as food and fodder. It is a kharif crop which requires temperature between 21°C to 27°C and grows well in old alluvial soil. In some states like Bihar maize is grown in rabi season also. Use of modern inputs such as HYV seeds, fertilisers and irrigation have contributed to the increasing production of maize. Major maize-producing states are Karnataka, Uttar Pradesh, Bihar, Andhra Pradesh and Madhya Pradesh.

**Pulses:** India is the largest producer as well as the consumer of pulses in the world. These are the major source of protein in a vegetarian diet. Major pulses that are grown in India are tur (arhar), urad, moong, masur, peas and gram. Can you distinguish which of these pulses are grown in the kharif season and which are grown in the rabi season? Pulses need less moisture and survive even in dry conditions. Being leguminous crops,

all these crops except arhar help in restoring soil fertility by fixing nitrogen from the air. Therefore, these are mostly grown in rotation with other crops. Major pulse producing states in India are Madhya Pradesh, Uttar Pradesh, Rajasthan, Maharashtra and Karnataka.

### Food Crops other than Grains

**Sugarcane:** It is a tropical as well as a subtropical crop. It grows well in hot and humid climate with a temperature of 21°C to 27°C and an annual rainfall between 75cm. and 100cm. Irrigation is required in the regions of low rainfall. It can be grown on a variety of soils and needs manual labour from sowing to harvesting. India is the second largest producer of sugarcane only after Brazil. It is the main source of sugar, gur (jaggery), khandsari and molasses. The major sugarcane-producing states are Uttar Pradesh, Maharashtra, Karnataka, Tamil Nadu, Andhra Pradesh, Bihar, Punjab and Haryana.

**Oil Seeds:** India is the largest producer of oil-seeds in the world. Different oil seeds are grown covering approximately 12 per cent of the total cropped area of the country. Main oil-seeds produced in India are groundnut, mustard, coconut, sesamum (til), soyabean, castor seeds, cotton seeds, linseed and sunflower. Most of these are edible and used as cooking mediums. However, some of these are also used as raw material in the production of soap, cosmetics and ointments. Groundnut is a kharif crop and accounts for about half of the major oilseeds produced in the country. Andhra Pradesh is the largest producer of groundnut followed by Tamil Nadu, Karnataka, Gujarat and Maharashtra – linseed and mustard are rabi crops. Sesamum is a kharif crop in north and rabi crop in south India. Castor seed is grown both as rabi and kharif crop.

**Tea:** Tea cultivation is an example of plantation agriculture. It is also an important beverage crop introduced in India initially by the British. Today, most of the tea plantations are owned by Indians. The tea plant grows well in tropical and sub-tropical climates endowed with deep and fertile well-drained soil, rich in humus and organic matter. Tea bushes require warm and moist frost-free climate all through the year. Frequent showers evenly distributed over the year ensure continuous growth of tender leaves. Tea is a labour-intensive industry. It requires abundant, cheap and skilled labour. Tea is processed within the tea garden to restore its freshness. Major tea-producing states are Assam, hills of Darjeeling and Jalpaiguri districts, West Bengal, Tamil Nadu and Kerala. Apart from these, Himachal Pradesh, Uttarakhand, Meghalaya, Andhra Pradesh and Tripura are also tea-producing states in the country. India is the leading producer as well as exporter of tea in the world.

**Coffee:** India produces about four per cent of the world's coffee production. Indian coffee is known in the world for its good quality. The Arabica variety initially brought from Yemen is produced in the country. This variety is in great demand all over the world. Initially its cultivation was introduced on the Baba Budan Hills and even today its cultivation is confined to the Nilgiri in Karnataka, Kerala and Tamil Nadu.

**Horticulture Crops:** India is the largest producer of fruits and vegetables in the world. India is a producer of tropical as well as temperate fruits. Mangoes of Maharashtra, Andhra Pradesh, Uttar Pradesh and West Bengal, oranges of Nagpur and Cherrapunjee (Meghalaya), bananas of Kerala, Mizoram, Maharashtra and Tamil Nadu, lichi and guava of Uttar Pradesh and Bihar, pineapples of Meghalaya, grapes of Andhra

Pradesh and Maharashtra, apples, pears, apricots and walnuts of Jammu and Kashmir and Himachal Pradesh are in great demand the world over.

India produces about 13 per cent of the world's vegetables. It is an important producer of pea, cauliflower, onion, cabbage, tomato, brinjal and potato.

### Non-Food Crops

**Rubber:** It is an equatorial crop, but under special conditions, it is also grown in tropical and sub-tropical areas. It requires moist and humid climate with rainfall of more than 200 cm. and temperature above 25°C. Rubber is an important industrial raw material. It is mainly grown in Kerala, Tamil Nadu, Karnataka and Andaman and Nicobar islands and Garo hills of Meghalaya. India ranks fifth among the world's natural rubber producers.

**Fibre Crops:** Cotton, jute, hemp and natural silk are the four major fibre crops grown in India. The first three are derived from the crops grown in the soil, the latter is obtained from cocoons of the silkworms fed on green leaves specially mulberry. Rearing of silk worms for the production of silk fibre is known as sericulture.

**Cotton:** India is believed to be the original home of the cotton plant. Cotton is one of the main raw materials for cotton textile industry. India is the third-largest producer of cotton in the world. Cotton grows well in drier parts of the black cotton soil of the Deccan plateau. It requires high temperature, light rainfall or irrigation, 210 frost-free days and bright sun-shine for its growth. It is a kharif crop and requires 6 to 8 months to mature. Major cotton-producing states are—Maharashtra, Gujarat, Madhya Pradesh, Karnataka, Andhra Pradesh, Tamil Nadu, Punjab, Haryana and Uttar Pradesh.

**Jute:** It is known as the golden fibre. Jute grows well on well-drained fertile soils in the flood plains where soils are renewed every year. High temperature is required during the time of growth. West Bengal, Bihar, Assam, Orissa and Meghalaya are the major jute producing states. It is used in making gunny bags, mats, ropes, yarn, carpets and other artefacts. Due to its high cost, it is losing market to synthetic fibres and packing materials, particularly the nylon.

### Technological and Institutional Reforms

It was mentioned in the previous pages that agriculture has been practised in India for thousands of years. Sustained uses of land without compatible technological changes have hindered the pace of agricultural development. In spite of development of sources of irrigation most of the farmers in large parts of the country still depend upon monsoon and natural fertility in order to carry on their agriculture. For a growing population, this poses a serious challenge. Agriculture which provides livelihood for more than 60 per cent of its population, needs some serious technical and institutional reforms. Thus, collectivisation, consolidation of holdings, cooperation and abolition of zamindari, etc. were given priority to bring about institutional reforms in the country after Independence. 'Land reform' was the main focus of our First Five Year Plan. The right of inheritance had already led to fragmentation of land holdings necessitating consolidation of holdings.

The laws of land reforms were enacted but the laws of implementation were lacking or lukewarm. The Government of India embarked upon introducing agricultural reforms to improve Indian agriculture in the 1960s and 1970s. The Green Revolution based on the use of package technology and the White Revolution

(Operation Flood) were some of the strategies initiated to improve the lot of Indian agriculture. But, this too led to the concentration of development in few selected areas. Therefore, in the 1980s and 1990s, a comprehensive land development programme was initiated, which included both institutional and technical reforms. Provision for crop insurance against drought, flood, cyclone, fire and disease, establishment of Grameen banks, cooperative societies and banks for providing loan facilities to the farmers at lower rates of interest were some important steps in this direction.

### Bhoodan – Gramdan

*Mahatma Gandhi declared Vinoba Bhave as his spiritual heir. He also participated in Satyagraha as one of the foremost satyagrahis. He was one of the votaries of Gandhi's concept of gram swarajya. After Gandhi's martyrdom, Vinobha Bhave undertook padyatra to spread Gandhi's message covered almost the entire country. Once, when he was delivering a lecture at Pochampalli in Andhra Pradesh, some poor landless villagers demanded some land for their economic well-being. Vinoba Bhave could not promise it to them immediately but assured them to talk to the Government of India regarding provision of land for them if they undertook cooperative farming.*

*Suddenly, Shri Ram Chandra Reddy stood up and offered 80 acres of land to be distributed among 80 land-less villagers. This act was known as 'Bhoodan'. Later he travelled and introduced his ideas widely all over India. Some zamindars, owners of many villages offered to distribute some villages among the landless. It was known as Gramdan. However, many land-owners chose to provide some part of their land to the poor farmers due to the fear of land ceiling act. This Bhoodan-Gramdan movement initiated by Vinobha Bhave is also known as the Blood-less Revolution.*

Kissan Credit Card (KCC), Personal Accident Insurance Scheme (PAIS) are some other schemes introduced by the Government of India for the benefit of the farmers. Moreover, special weather bulletins and agricultural programmes for farmers were introduced on the radio and television. The government also announces minimum support price, remunerative and procurement prices for important crops to check the exploitation of farmers by speculators and middlemen.

### Contribution of agriculture to the national economy, employment and output

Agriculture has been the backbone of the Indian economy though its share in the Gross Domestic Product (GDP) has registered a declining trend from 1951 onwards; yet its share in providing employment and livelihood to the population continues to be as high as 63 per cent in 2001.

The declining share of agriculture in the GDP is a matter of serious concern because any decline and stagnation in agriculture will lead to a decline in other spheres of the economy having wider implications for society. Considering the importance of agriculture in India, the Government of India made concerted efforts to modernise agriculture. Establishment of Indian Council of Agricultural Research (ICAR), agricultural universities, veterinary services and animal breeding centres, horticulture development, research and development in the field of meteorology and weather forecast, etc. were given priority for improving Indian agriculture. Apart from this, improving the rural infrastructure was also considered essential for the same.

From the Table 4.1, it is clear that though the GDP



growth rate is increasing over the years, it is not generating sufficient employment opportunities in the country. The growth rate in agriculture is decelerating which is an alarming situation. Today, Indian farmers are facing a big challenge from international competition and our government is going ahead with reduction in the public investment in agriculture sector particularly in irrigation, power, rural roads, market and mechanisation. Subsidy on fertilisers is decreased leading to increase in the cost of production. Moreover, reduction in import duties on agricultural products have proved detrimental to agriculture in the country. Farmers are withdrawing their investment from agriculture causing a downfall in the employment in agriculture.

*Why are farmers committing suicides in several states of the country?*

### Food Security

You know that food is a basic need and every citizen of the country should have access to food which provides minimum nutritional level. If any segment of our population does not have this access, that segment suffers from lack of food security. The number of people who do not have food security is disproportionately large in some regions of our country, particularly in economically less developed states with higher incidence of poverty. The remote areas of the country are more prone to natural disasters and uncertain food supply. In order to ensure availability of food to all sections of society our government carefully designed a national food security system. It consists of two components (a) buffer stock and (b) public distribution system (PDS).

As you know, PDS is a programme which provides food grains and other essential commodities at subsidised prices in rural and urban areas.

India's food security policy has a primary objective to ensure availability of foodgrains to the common people at an affordable price. It has enabled the poor to have access to food. The focus of the policy is on growth in agriculture production and on fixing the support price for procurement of wheat and rice, to maintain their stocks. Food Corporation of India (FCI) is responsible for procuring and stocking foodgrains, whereas distribution is ensured by public distribution system (PDS).

The FCI procures foodgrains from the farmers at the government announced minimum support price (MSP). The government used to provide subsidies on agriculture inputs such as fertilizers, power and water. These subsidies have now reached unsustainable levels and have also led to large scale inefficiencies in the use of these scarce inputs. Excessive and imprudent use of fertilizers and water has led to waterlogging, salinity and depletion of essential micronutrients in the soil. The high MSP, subsidies in input and committed FCI purchases have distorted the cropping pattern. Wheat and paddy crops are being grown more for the MSP they get. Punjab and Haryana are foremost examples. This has also created a serious imbalance in inter-crop parities.

You already know that the consumers are divided into two categories: below poverty line (BPL) and above poverty line (APL), with the issue price being different for each category. However, this categorisation is not perfect and a number of deserving poor have been excluded from the BPL category. Moreover, some of the so called APL slip back to BPL, because of the failure of even one crop and it is administratively difficult to

accommodate such shifts.

Each district and block can be made self sufficient in foodgrain production if government provides proper agricultural infrastructure, credit linkages and also encourages the use of latest techniques. Instead of concentrating only on rice or wheat, the food crop with a better growth potential in that particular area must be encouraged. Creation of necessary infrastructure like irrigation facilities, availability of electricity etc. may also attract private investments in agriculture.

*When farmers have been facing so many problems and land under agriculture is decreasing, can we think of alternative employment opportunities in the agriculture sector?*

*Genetic engineering is recognised as a powerful supplement in inventing new hybrid varieties of seeds.*

The focus on increasing foodgrain production which should be on a sustainable basis and also free trade in grains will create massive employment and reduce poverty in rural areas.

There has been a gradual shift from cultivation of food crops to cultivation of fruits, vegetables, oil-seeds and industrial crops. This has led to the reduction in net sown area under cereals and pulses. With the growing population of India, the declining food production puts a big question mark over the country's future food security. The competition for land between non-agricultural uses such as housing etc. and agriculture has resulted in reduction in the net sown area. The productivity of land has started showing a declining trend. Fertilisers, pesticides and insecticides, which once showed dramatic results, are now being held responsible for degrading the soils. Periodic scarcity of water has led to reduction in area under irrigation. Inefficient water management has led to water logging and salinity.

*Do you know why foodgrains productions has remained stagnant or fallen for six consecutive years?*

One important reason is land degradation. Free power to a section of farmers has encouraged them to pump groundwater to grow water-intensive crops in low-rainfall areas (rice in Punjab, sugarcane in Maharashtra). This unsustainable pumping has reduced water storage in aquifers. Consequently, many wells and tubewells have run dry. This has pushed the marginal and small farmers out of cultivation.

The big farmers with deeper tubewells still have water, but many others face a water crisis. Inadequate storage and marketing facilities also act as a disincentive to the farmer. Thus, the farmers are badly affected by the uncertainties of production and market. They suffer from a double disadvantage as they pay high prices for inputs such as HYV seeds, fertilisers etc. but lack the bargaining power to fix prices in their favour. All the production reaches the market simultaneously. The higher the supply the lower is the demand. This causes distress sale also. Therefore, there can be no food security without the security of the small farmers.

### Impact of Globalisation on Agriculture

Globalisation is not a new phenomenon. It was there at the time of colonisation. In the nineteenth century when European traders came to India, at that time too, Indian spices were exported to different countries of the world and farmers of south India were encouraged to grow these crops. Till today it is one of the important items of export from India.

During the British period cotton belts of India attracted the British and ultimately cotton was exported to Britain as a raw material for their textile industries. Cotton

textile industry in Manchester and Liverpool flourished due to the availability of good quality cotton from India. You have read about the Champaran movement which started in 1917 in Bihar. This was started because farmers of that region were forced to grow indigo on their land because it was necessary for the textile industries which were located in Britain. They were unable to grow foodgrains to sustain their families. Under globalisation, particularly after 1990, the farmers in India have been exposed to new challenges. Despite being an important producer of rice, cotton, rubber, tea, coffee, jute and spices our agricultural products are not able to compete with the developed countries because of the highly subsidised agriculture in those countries. Today, Indian agriculture finds itself at the crossroads. To make agriculture successful and profitable, proper thrust should be given to the improvement of the condition of marginal and small farmers. The green revolution promised much. But today it's under controversies. It is being alleged that it has caused land degradation due to overuse of chemicals, drying aquifers and vanishing biodiversity. The keyword today is "gene revolution". Which includes genetic engineering.

### **Can you name any gene modified seed used vastly in India?**

Infact organic farming is much in vogue today because it is practised without factory made chemicals such as fertilisers and pesticides. Hence, it does not affect environment in a negative manner.

Change in cropping pattern for example from cereals to high-value crops will mean that India will have to import food. During 1960's this would have been seen as a disaster. But if India imports cereals while exporting high-value commodities, it will be following successful economies like Italy, Israel and Chile. These countries exports farm products (fruits, olives, speciality seeds and wine) and import cereals. Are we ready to take this risk? Debate the issue.

A few economists think that Indian farmers have a bleak future if they continue growing foodgrains on the holdings that grow smaller and smaller as the population rises. India's rural population is about 600 million which depends upon 250 million (approximate) hectares of agricultural land, an average of less than half a hectare per person.

Indian farmers should diversify their cropping pattern from cereals to high-value crops. This will increase incomes and reduce environmental degradation simultaneously. Because fruits, medicinal herbs, flowers, vegetables, bio-diesel crops like jatropha and jojoba need much less irrigation than rice or sugarcane. India's diverse climate can be harnessed to grow a wide range of high-value crops.

**Important Terms** **Jhumming:** Jhum cultivation, also known as the slash and burn agriculture, is the process of growing crops by first clearing the land of trees and vegetation and burning them thereafter. **Rabi:** The rabi crops are sown around mid-November, after the monsoon rains are over, and harvesting begins in April/May. The major rabi crop in India is wheat, followed by barley, mustard, sesame and peas. **Kharif:** Crops are grown with the onset of monsoon and harvested at the beginning of winters. **Zaid:** A short cropping season in between the Rabi and the Kharif seasons used for growing vegetables and fodder crops. **Crop Rotation:** Crop rotation is the practice of growing a series of dissimilar or different types of crops in the same area in sequenced seasons. **ICAR:** The Indian Council of Agricultural Research is an autonomous body responsible for co-ordinating agricultural education and research in India. **Organic Farming:** Organic farming is a production system which avoids or largely excludes the use of

synthetically compounded fertilizers, pesticides, growth regulators, genetically modified organisms and livestock food additives. **Minimum Support Price (MSP):** A minimum guaranteed price of a crop, fixed and announced by the government before the start of a cropping season. **Kisan Credit Card (KCC):** A Kisan Credit Card (KCC) is a credit delivery mechanism that is aimed at enabling farmers to have quick and timely access to affordable credit.

## **Chapter 5**

### **Minerals And Energy Resources**

*Haban comes to Guwahati with his father from a remote village.*

*He sees people getting into strange house like objects which move along the road. He also sees a "kitchen" dragging a number of house along with it. He is amazed and asked his father "Why don't our houses move like the one we saw in Guwahati, Ba?"*

*Ba replies, "These are not houses, they are buses and trains. Unlike our houses these are not made of bricks and stones, metal like iron and aluminium are used in making these. They do not move on their own. They are driven by an engine which needs energy to work."*

We use different things in our daily life made from metal. Can you list a number of items used in your house made of metals. Where do these metals come from? You have studied that the earth's crust is made up of different minerals embedded in the rocks. Various metals are extracted from these minerals after proper refinement.

Minerals are an indispensable part of our lives. Almost everything we use, from a tiny pin to a towering building or a big ship, all are made from minerals. The railway lines and the tarmac (paving) of the roads, our implements and machinery too are made from minerals. Cars, buses, trains, aeroplanes are manufactured from minerals and run on power resources derived from the earth. Even the food that we eat contains minerals. In all stages of development, human beings have used minerals for their livelihood, decoration, festivities, religious and ceremonial rites.

### **A bright smile from toothpaste and minerals**

*Toothpaste cleans your teeth. Abrasive minerals like silica, limestone, aluminium oxide and various phosphate minerals do the cleaning. Fluoride which is used to reduce cavities, comes from a mineral fluorite. Most toothpaste are made white with titanium oxide, which comes from minerals called rutile, ilmenite and anatase. The sparkle in some toothpastes comes from mica. The toothbrush and tube containing the paste are made of plastics from petroleum. Find out where these minerals are found?*

### **Dig a little deeper and collect "Nutritional Facts" printed on food labels.**

### **All living things need minerals**

*Life processes cannot occur without minerals. Although our mineral intake represents only about 0.3 per cent of our total intake of nutrients, they are so potent and so important that without them we would not be able to utilise the other 99.7 per cent of foodstuffs.*

### **Dig a little deeper and find out how many minerals are used to make a light bulb?**

### **What is a mineral?**

Geologists define mineral as a "homogenous, naturally occurring substance with a definable internal structure." Minerals are found in varied forms in nature, ranging from the hardest diamond to the softest talc. Why are

they so varied?

You have already learnt about rocks. Rocks are combinations of homogenous substances called minerals. Some rocks, for instance limestone, consist of a single mineral only, but majority of the rock consist of several minerals in varying proportions. Although, over 2000 minerals have been identified, only a few are abundantly found in most of the rocks.

A particular mineral that will be formed from a certain combination of elements depends upon the physical and chemical conditions under which the material forms.

This, in turn, results in a wide range of colours, hardness, crystal forms, lustre and density that a particular mineral possesses. Geologists use these properties to classify the minerals.

### Study of Minerals by Geographers and Geologists

*Geographers study minerals as part of the earth's crust for a better understanding of landforms. The distribution of mineral resources and associated economic activities are of interest to geographers. A geologist, however, is interested in the formation of minerals, their age and physical and chemical composition.*

However, for general and commercial purposes minerals can be classified as under.

### Mode of Occurrence of Minerals

#### Where are these minerals found?

Minerals are usually found in "ores". The term ore is used to describe an accumulation of any mineral mixed with other elements. The mineral content of the ore must be in sufficient concentration to make its extraction commercially viable. The type of formation or structure in which they are found determines the relative ease with which mineral ores may be mined. This also determines the cost of extraction. It is, therefore, important for us to understand the main types of formations in which minerals occur.

Minerals generally occur in these forms:

- (i) In igneous and metamorphic rocks minerals may occur in the cracks, crevices, faults or joints. The smaller occurrences are called veins and the larger are called lodes. In most cases, they are formed when minerals in liquid/molten and gaseous forms are forced upward through cavities towards the earth's surface. They cool and solidify as they rise. Major metallic minerals like tin, copper, zinc and lead etc. are obtained from veins and lodes.
- (ii) In sedimentary rocks a number of minerals occur in beds or layers. They have been formed as a result of deposition, accumulation and concentration in horizontal strata. Coal and some forms of iron ore have been concentrated as a result of long periods under great heat and pressure. Another group of sedimentary minerals include gypsum, potash salt and sodium salt. These are formed as a result of evaporation especially in arid regions.
- (iii) Another mode of formation involves the decomposition of surface rocks, and the removal of soluble constituents, leaving a residual mass of weathered material containing ores. Bauxite is formed this way.
- (iv) Certain minerals may occur as alluvial deposits in sands of valley floors and the base of hills. These deposits are called 'placer deposits' and generally contain minerals, which are not corroded by water. Gold, silver, tin and platinum are most important among such minerals.
- (v) The ocean waters contain vast quantities of minerals, but most of these are too widely diffused to be of

economic significance. However, common salt, magnesium and bromine are largely derived from ocean waters. The ocean beds, too, are rich in manganese nodules.

India is fortunate to have fairly rich and varied mineral resources. However, these are unevenly distributed. Broadly speaking, peninsular rocks contain most of the reserves of coal, metallic minerals, mica and many other non-metallic minerals. Sedimentary rocks on the western and eastern flanks of the peninsula, in Gujarat and Assam have most of the petroleum deposits. Rajasthan with the rock systems of the peninsula, has reserves of many non-ferrous minerals. The vast alluvial plains of north India are almost devoid of economic minerals. These variations exist largely because of the differences in the geological structure, processes and time involved in the formation of minerals.

### Interesting Facts

**Rat-Hole Mining.** *Do you know that most of the minerals in India are nationalised and their extraction is possible only after obtaining due permission from the government? But in most of the tribal areas of the north-east India, minerals are owned by individuals or communities. In Meghalaya, there are large deposits of coal, iron ore, limestone and dolomite etc. Coal mining in Jowai and Cherapunjee is done by family member in the form of a long narrow tunnel, known as 'Rat hole' mining.*

Let us now study the distribution of a few major minerals in India. Always remember that the concentration of mineral in the ore, the ease of extraction and closeness to the market play an important role in affecting the economic viability of a reserve. Thus, to meet the demand, a choice has to be made between a number of possible options. When this is done a mineral 'deposit' or 'reserve' turns into a mine.

### Ferrous Minerals

Ferrous minerals account for about three-fourths of the total value of the production of metallic minerals. They provide a strong base for the development of metallurgical industries. India exports substantial quantities of ferrous minerals after meeting her internal demands.

#### Iron Ore

Iron ore is the basic mineral and the backbone of industrial development. India is endowed with fairly abundant resources of iron ore. India is rich in good quality iron ores. Magnetite is the finest iron ore with a very high content of iron up to 70 per cent. It has excellent magnetic qualities, especially valuable in the electrical industry. Hematite ore is the most important industrial iron ore in terms of the quantity used, but has a slightly lower iron content than magnetite. (50-60 per cent).

The major iron ore belts in India are:

- Orissa-Jharkhand belt: In Orissa high grade hematite ore is found in Badampahar mines in the Mayurbhanj and Kendujhar districts. In the adjoining Singhbhum district of Jharkhand haematite iron ore is mined in Gua and Noamundi.

### Do You Know

Kudre in Kannada means horse. The highest peak in the western ghats of Karnataka resembles the face of a horse. The Bailadila hills look like the hump of an ox, and hence its name.

- Durg-Bastar-Chandrapur belt lies in Chhattisgarh and Maharashtra. Very high grade hematites are found in the famous Bailadila range of hills in the Bastar district of Chhattisgarh. The range of hills comprise of 14 deposits



of super high grade hematite iron ore. It has the best physical properties needed for steel making. Iron ore from these mines is exported to Japan and South Korea via Vishakapatnam port.

- Bellary-Chitradurga-Chikmagalur-Tumkur belt in Karnataka has large reserves of iron ore. The Kudremukh mines located in the Western Ghats of Karnataka are a 100 per cent export unit. Kudremukh deposits are known to be one of the largest in the world. The ore is transported as slurry through a pipeline to a port near Mangalore.

- Maharashtra-Goa belt includes the state of Goa and Ratnagiri district of Maharashtra. Though, the ores are not of very high quality, yet they are efficiently exploited. Iron ore is exported through Marmagao port.

### **Manganese**

Manganese is mainly used in the manufacturing of steel and ferro-manganese alloy. Nearly 10 kg of manganese is required to manufacture one tonne of steel. It is also used in manufacturing bleaching powder, insecticides and paints.

Orissa is the largest producer of manganese ores in India. It accounted for one-third of the country's total production in 2000-01.

**Dig a little deeper: Superimpose the maps showing distribution of iron ore, manganese, coal and iron and steel industry. Do you see any correlation.**

**Why?**

### **Non-Ferrous Minerals**

India's reserves and production of non-ferrous minerals is not very satisfactory. However, these minerals, which include copper, bauxite, lead, zinc and gold play a vital role in a number of metallurgical, engineering and electrical industries. Let us study the distribution of copper and bauxite.

*India: Distribution of Iron Ore, Manganese, Bauxite and Mica*

### **Copper**

India is critically deficient in the reserve and production of copper. Being malleable, ductile and a good conductor, copper is mainly used in electrical cables, electronics and chemical industries. The Balaghat mines in Madhya Pradesh produce 52 per cent of India's copper. The Singhbhum district of Jharkhand is also a leading producer of copper. The Khetri mines in Rajasthan are also famous.

### **Bauxite**

Though, several ores contain aluminium, it is from bauxite, a clay-like substance that alumina and later aluminium is obtained. Bauxite deposits are formed by the decomposition of a wide variety of rocks rich in aluminium silicates.

Aluminium is an important metal because it combines the strength of metals such as iron, with extreme lightness and also with good conductivity and great malleability.

India's bauxite deposits are mainly found in the Amarkantak plateau, Maikal hills and the plateau region of Bilaspur-Katni.

Orissa is the largest bauxite producing state in India with 45 per cent of the country's total production in 2000-01. Panchpatmali deposits in Koraput district are the most important bauxite deposits in the state.

**Dig a little deeper: Locate the mines of Bauxite on the physical map of India.**

### **Non-Metallic Minerals**

Mica is a mineral made up of a series of plates or leaves. It splits easily into thin sheets. These sheets can be so thin that a thousand can be layered into a mica sheet of a

few centimeters high. Mica can be clear, black, green, red yellow or brown. Due to its excellent di-electric strength, low power loss factor, insulating properties and resistance to high voltage, mica is one of the most indispensable minerals used in electric and electronic industries.

Mica deposits are found in the northern edge of the Chota Nagpur plateau. Koderma Gaya – Hazaribagh belt of Jharkhand is the leading producer.

In Rajasthan, the major mica producing area is around Ajmer. Nellore mica belt of Andhra Pradesh is also an important producer in the country.

### **Rock Minerals**

Limestone is found in association with rocks composed of calcium carbonates or calcium and magnesium carbonates. It is found in sedimentary rocks of most geological formations. Limestone is the basic raw material for the cement industry and essential for smelting iron ore in the blast furnace.

**Dig a little deeper: Study the maps to explain why Chota Nagpur is a storehouse of minerals.**

Stricter safety regulations and implementation of environmental laws are essential to prevent mining from becoming a "killer industry".

### **Conservation of Minerals**

We all appreciate the strong dependence of industry and agriculture upon mineral deposits and the substances manufactured from them. The total volume of workable mineral deposits is an insignificant fraction i.e. one per cent of the earth's crust. We are rapidly consuming mineral resources that required millions of years to be created and concentrated. The geological processes of mineral formation are so slow that the rates of replenishment are infinitely small in comparison to the present rates of consumption. Mineral resources are, therefore, finite and non-renewable. Rich mineral deposits are our country's extremely valuable but short-lived possessions. Continued extraction of ores leads to increasing costs as mineral extraction comes from greater depths along with decrease in quality.

### **Interesting Fact**

*After the discovery of aluminium Emperor Napoleon III wore buttons and hooks on his clothes made of aluminium and served food to his more illustrious guests in aluminium utensils and the less honourable ones were served in gold and silver utensils. Thirty years after this incident aluminium bowls were most common with the beggars in Paris.*

### **Hazards of Mining**

*Have you ever wondered about the efforts the miners make in making life comfortable for you? What are the impacts of mining on the health of the miners and the environment?*

*The dust and noxious fumes inhaled by miners make them vulnerable to pulmonary diseases. The risk of collapsing mine roofs, inundation and fires in coal mines are a constant threat to miners.*

*The water sources in the region get contaminated due to mining. Dumping of waste and slurry leads to degradation of land, soil, and increase in stream and river pollution.*

A concerted effort has to be made in order to use our mineral resources in a planned and sustainable manner. Improved technologies need to be constantly evolved to allow use of low grade ores at low costs. Recycling of metals, using scrap metals and other substitutes are steps in conserving our mineral resources for the future.

**Dig a little deeper: Make a list of items where substitutes are being used instead of minerals.**

### Where are these substitutes obtained from?

#### Energy Resources

Energy is required for all activities. It is needed to cook, to provide light and heat, to propel vehicles and to drive machinery in industries.

Energy can be generated from fuel minerals like coal, petroleum, natural gas, uranium and from electricity. Energy resources can be classified as conventional and non-conventional sources. Conventional sources include: firewood, cattle dung cake, coal, petroleum, natural gas and electricity (both hydel and thermal). Non-conventional sources include solar, wind, tidal, geothermal, biogas and atomic energy. Firewood and cattle dung cake are most common in rural India.

According to one estimate more than 70 per cent energy requirement in rural households is met by these two ; continuation of these is increasingly becoming difficult due to decreasing forest area. Moreover, using dung cake too is being discouraged because it consumes most valuable manure which could be used in agriculture.

#### Conventional Sources of Energy

##### Coal

In India, coal is the most abundantly available fossil fuel. It provides a substantial part of the nation's energy needs. It is used for power generation, to supply energy to industry as well as for domestic needs. India is highly dependent on coal for meeting its commercial energy requirements.

As you are already aware that coal is formed due the compression of plant material over millions of years. Coal, therefore, is found in a variety of forms depending on the degrees of compression and the depth and time of burial. Decaying plants in swamps produce peat. Which has a low carbon and high moisture contents and low heating capacity. Lignite is a low grade brown coal, which is soft with high moisture content. The principal lignite reserves are in Neyveli in Tamil Nadu and are used for generation of electricity. Coal that has been buried deep and subjected to increased temperatures is bituminous coal. It is the most popular coal in commercial use. Metallurgical coal is high grade bituminous coal which has a special value for smelting iron in blast furnaces. Anthracite is the highest quality hard coal.

In India coal occurs in rock series of two main geological ages, namely Gondwana, a little over 200 million years in age and in tertiary deposits which are only about 55 million years old. The major resources of Gondwana coal, which are metallurgical coal, are located in Damodar valley (West Bengal-Jharkhand). Jharia, Raniganj, Bokaro are important coalfields. The Godavari, Mahanadi, Son and Wardha valleys also contain coal deposits.

Tertiary coals occur in the north eastern states of Meghalaya, Assam, Arunachal Pradesh and Nagaland. Remember coal is a bulky material, which loses weight on use as it is reduced to ash. Hence, heavy industries and thermal power stations are located on or near the coalfields.

##### Petroleum

Petroleum or mineral oil is the next major energy source in India after coal. It provides fuel for heat and lighting, lubricants for machinery and raw materials for a number of manufacturing industries. Petroleum refineries act as a "nodal industry" for synthetic textile, fertiliser and numerous chemical industries.

Most of the petroleum occurrences in India are associated with anticlines and fault traps in the rock formations of the tertiary age. In regions of folding,

anticlines or domes, it occurs where oil is trapped in the crest of the upfold. The oil bearing layer is a porous limestone or sandstone through which oil may flow. The oil is prevented from rising or sinking by intervening non-porous layers.

Petroleum is also found in fault traps between porous and non-porous rocks. Gas, being lighter usually occurs above the oil.

About 63 per cent of India's petroleum production is from Mumbai High, 18 per cent from Gujarat and 16 per cent from Assam. From the map locate the 3 major off shore fields of western India. Ankeleshwar is the most important field of Gujarat. Assam is the oldest oil producing state of India. Digboi, Naharkatiya and Moran-Hugrijan are the important oil fields in the state.

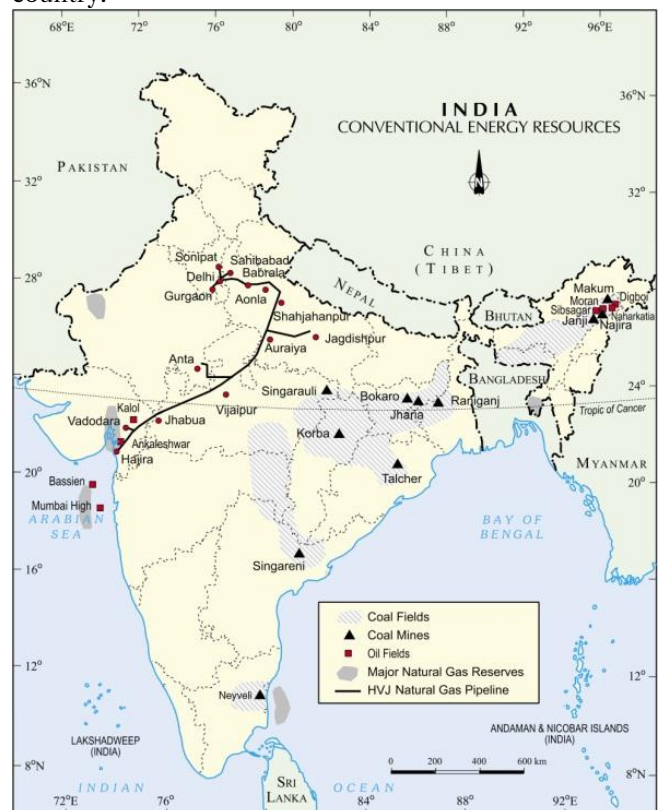
##### Natural Gas

Natural gas is an important clean energy resource found in association with or without petroleum. It is used as a source of energy as well as an industrial raw material in the petrochemical industry.

Natural gas is considered an environment friendly fuel because of low carbon dioxide emissions and is, therefore, the fuel for the present century.

Large reserves of natural gas have been discovered in the Krishna- Godavari basin. Along the west coast the reserves of the Mumbai High and allied fields are supplemented by finds in the Gulf of Cambay. Andaman and Nicobar islands are also important areas having large reserves of natural gas.

The 1700 km long Hazira-Vijaipur- Jagdishpur cross country gas pipeline links Mumbai High and Bassien with the fertilizer, power and industrial complexes in western and northern India. This artery has provided an impetus to India's gas production. The power and fertilizer industries are the key users of natural gas. Use of Compressed Natural Gas (CNG) for vehicles to replace liquid fuels is gaining wide popularity in the country.



India: Distribution of Coal, Oil and Natural Gas

##### Electricity

Electricity has such a wide range of applications in

today's world that, its percapita consumption is considered as an index of development. Electricity is generated mainly in two ways: by running water which drives hydro turbines to generate hydro electricity; and by burning other fuels such as coal, petroleum and natural gas to drive turbines to produce thermal power. Once generated the electricity is exactly the same. Hydro electricity is generated by fast flowing water, which is a renewable resource. India has a number of multi-purpose projects like the Bhakra Nangal, Damodar Valley corporation, the Kopili Hydel Project etc. producing hydroelectric power.

Thermal electricity is generated by using coal, petroleum and natural gas. The thermal power stations use non-renewable fossil fuels for generating electricity. There are over 310 thermal power plants in India.

**From the map identify a thermal power station in your state and also name the fuel that is used there.**

### Non-Conventional Sources of Energy

The growing consumption of energy has resulted in the country becoming increasingly dependent on fossil fuels such as coal, oil and gas. Rising prices of oil and gas and their potential shortages have raised uncertainties about the security of energy supply in future, which in turn has serious repercussions on the growth of the national economy. Moreover, increasing use of fossil fuels also causes serious environmental problems. Hence, there is a pressing need to use renewable energy sources like solar energy, wind, tide, biomass and energy from waste material. These are called non-conventional energy sources.

India is blessed with an abundance of sunlight, water, wind and biomass. It has the largest programmes for the development of these renewable energy resources.

### Nuclear or Atomic Energy

It is obtained by altering the structure of atoms. When such an alteration is made, much energy is released in the form of heat and this is used to generate electric power. Uranium and Thorium, which are available in Jharkhand and the Aravalli ranges of Rajasthan are used for generating atomic or nuclear power.



India: Distribution of Nuclear and Thermal Power

### Plants

The Monazite sands of Kerala is also rich in Thorium.

**Locate the 6 nuclear power stations and find out the state in which they are located.**

### Solar Energy

India is a tropical country. It has enormous possibilities of tapping solar energy. Photovoltaic technology converts sunlight directly into electricity. Solar energy is fast becoming popular in rural and remote areas. The largest solar plant of India is located at Madhapur, near Bhuj, where solar energy is used to sterilise milk cans. It is expected that use of solar energy will be able to minimise the dependence of rural households on firewood and dung cakes, which in turn will contribute to environmental conservation and adequate supply of manure in agriculture.

### Wind power

India now ranks as a "wind super power" in the world. The largest wind farm cluster is located in Tamil Nadu from Nagarcoil to Madurai. Apart from these, Andhra Pradesh, Karnataka, Gujarat, Kerala, Maharashtra and Lakshadweep have important wind farms. Nagarcoil and Jaisalmer are well known for effective use of wind energy in the country.

### Biogas

Shrubs, farm waste, animal and human waste are used to produce biogas for domestic consumption in rural areas. Decomposition of organic matter yields gas, which has higher thermal efficiency in comparison to kerosene, dung cake and charcoal. Biogas plants are set up at municipal, cooperative and individual levels. The plants using cattle dung are known as 'Gobar gas plants' in rural India. These provide twin benefits to the farmer in the form of energy and improved quality of manure. Biogas is by far the most efficient use of cattle dung. It improves the quality of manure and also prevents the loss of trees and manure due to burning of fuel wood and cow dung cakes.

### Tidal Energy

Oceanic tides can be used to generate electricity. Floodgate dams are built across inlets. During high tide water flows into the inlet and gets trapped when the gate is closed. After the tide falls outside the flood gate, the water retained by the floodgate flows back to the sea via a pipe that carries it through a power-generating turbine.

In India, the Gulf of Kutch, provides ideal conditions for utilising tidal energy. A 900 mw tidal energy power plant is set up here by the National Hydropower Corporation.

### Geo Thermal Energy

Geothermal energy refers to the heat and electricity produced by using the heat from the interior of the Earth. Geothermal energy exists because, the Earth grows progressively hotter with increasing depth. Where the geothermal gradient is high, high temperatures are found at shallow depths. Groundwater in such areas absorbs heat from the rocks and becomes hot. It is so hot that when it rises to the earth's surface, it turns into steam. This steam is used to drive turbines and generate electricity.

There are several hundred hot springs in India, which could be used to generate electricity. Two experimental projects have been set up in India to harness geothermal energy. One is located in the Parvati valley near Manikarn in Himachal Pradesh and the other is located in the Puga Valley, Ladakh.

### Conservation of Energy Resources

Energy is a basic requirement for economic



development. Every sector of the national economy – agriculture, industry, transport, commercial and domestic – needs inputs of energy. The economic development plans implemented since Independence necessarily required increasing amounts of energy to remain operational. As a result, consumption of energy in all forms has been steadily rising all over the country. In this background, there is an urgent need to develop a sustainable path of energy development. Promotion of energy conservation and increased use of renewable energy sources are the twin planks of sustainable energy.

India is presently one of the least energy efficient countries in the world. We have to adopt a cautious approach for the judicious use of our limited energy resources. For example, as concerned citizens we can do our bit by using public transport systems instead of individual vehicles; switching off electricity when not in use, using power-saving devices and using non-conventional sources of energy. After all, “energy saved is energy produced”.

**Important Terms Open Cast Mining:** Open-pit, open-cast or open cut mining is a surface mining technique of extracting rock or minerals from the earth by their removal from an open pit or borrow. **Shaft mining:** Shaft mining is a form of underground mining using shafts driven vertically from the top down into the earth to access ore or minerals.. **Quarrying:** Quarrying is the process of removing rock, sand, gravel or other minerals from the ground in order to use them to produce materials for construction or other uses. **Biogas:** Biogas typically refers to a mixture of different gases produced by the breakdown of organic matter in the absence of oxygen. **Geothermal energy:** Geothermal energy is the heat emanating from underneath the surface of the earth. Know the Link [www.importantindia.com/.../conventional-and-non-conventional-sources](http://www.importantindia.com/.../conventional-and-non-conventional-sources)

## Chapter 6 Manufacturing Industries

Production of goods in large quantities after processing from raw materials to more valuable products is called manufacturing. Do you know that paper is manufactured from wood, sugar from sugarcane, iron and steel from iron ore and aluminium from bauxite? Do you also know that some types of clothes are manufactured from yarn which itself is an industrial product?

The economic strength of a country is measured by the development of manufacturing industries.

### Importance of Manufacturing

Manufacturing sector is considered the backbone of development in general and economic development in particular mainly because–

- Manufacturing industries not only help in modernising agriculture, which forms the backbone of our economy, they also reduce the heavy dependence of people on agricultural income by providing them jobs in secondary and tertiary sectors.
- Industrial development is a precondition for eradication of unemployment and poverty from our country. This was the main philosophy behind public sector industries and joint sector ventures in India. It was also aimed at bringing down regional disparities by establishing industries in tribal and backward areas.
- Export of manufactured goods expands trade and commerce, and brings in much needed foreign exchange.
- Countries that transform their raw materials into a wide variety of furnished goods of higher value are

prosperous. India's prosperity lies in increasing and diversifying its manufacturing industries as quickly as possible.

Agriculture and industry are not exclusive of each other. They move hand in hand. For instance, the agro-industries in India have given a major boost to agriculture by raising its productivity. They depend on the latter for raw materials and sell their products such as irrigation pumps, fertilisers, insecticides, pesticides, plastic and PVC pipes, machines and tools, etc. to the farmers. Thus, development and competitiveness of manufacturing industry has not only assisted agriculturists in increasing their production but also made the production processes very efficient. In the present day world of globalisation, our industry needs to be more efficient and competitive. Self-sufficiency alone is not enough. Our manufactured goods must be at par in quality with those in the international market. Only then, will we be able to compete in the international market.

### Contribution of Industry to National Economy

Over the last two decades, the share of manufacturing sector has stagnated at 17 per cent of GDP – out of a total of 27 per cent for the industry which includes 10 per cent for mining, quarrying, electricity and gas.

This is much lower in comparison to some East Asian economies, where it is 25 to 35 per cent. The trend of growth rate in manufacturing over the last decade has been around 7 per cent per annum. The desired growth rate over the next decade is 12 per cent. Since 2003, manufacturing is once again growing at the rate of 9 to 10 per cent per annum. With appropriate policy interventions by the government and renewed efforts by the industry to improve productivity, economists predict that manufacturing can achieve its target over the next decade. The National Manufacturing Competitiveness Council (NMCC) has been set up with this objective.

### Industrial Location

Industrial locations are complex in nature. These are influenced by availability of raw material, labour, capital, power and market, etc. It is rarely possible to find all these factors available at one place.

Consequently, manufacturing Activity tends to locate at the most appropriate place where all the factors of industrial location are either available or can be arranged at lower cost. After an industrial Activity starts, urbanisation follows. Sometimes, industries are located in or near the cities. Thus, industrialisation and urbanisation go hand in hand. Cities provide markets and also provide services such as banking, insurance, transport, labour, consultants and financial advice, etc. to the industry. Many industries tend to come together to make use of the advantages offered by the urban centres known as agglomeration economies. Gradually, a large industrial agglomeration takes place. In the pre-Independence period, most manufacturing units were located in places from the point of view of overseas trade such as Mumbai, Kolkata, Chennai, etc. Consequently, there emerged certain pockets of industrially developed urban centres surrounded by a huge agricultural rural hinterland.

### Classification of Industries

#### On the basis of source of raw materials used:

- *Agro based: cotton, woollen, jute, silk textile, rubber and sugar, tea, coffee, edible oil.*
- *Mineral based: iron and steel, cement, aluminium, machine tools, petrochemicals.*

*According to their main role:*

- Basic or key industries which supply their products or raw materials to manufacture other goods e.g. iron and steel and copper smelting, aluminum smelting.
- Consumer industries that produce goods for direct use by consumers – sugar, toothpaste, paper, sewing machines, fans etc.

On the basis of capital investment:

- A small scale industry is defined with reference to the maximum investment allowed on the assets of a unit. This limit has changed over a period of time. At present the maximum investment allowed is rupees one crore. If investment is more than one crore on any industry then it is known as a large scale industry.

**On the basis of ownership:**

- Public sector, owned and operated by government agencies – BHEL, SAIL etc.
  - Private sector industries owned and operated by individuals or a group of individuals – TISCO, Bajaj Auto Ltd., Dabur Industries.
  - Joint sector industries which are jointly run by the state and individuals or a group of individuals. Oil India Ltd. (OIL) is jointly owned by public and private sector.
  - Cooperative sector industries are owned and operated by the producers or suppliers of raw materials, workers or both. They pool in the resources and share the profits or losses proportionately such as the sugar industry in Maharashtra, the coir industry in Kerala.
- Based on the bulk and weight of raw material and finished goods:

- Heavy industries such as iron and steel
- Light industries that use light raw materials and produce light goods such as electrical industries.

### Agro Based Industries

Cotton, jute, silk, woollen textiles, sugar and edible oil, etc. industry are based on agricultural raw materials.

**Textile Industry:** The textile industry occupies unique position in the Indian economy, because it contributes significantly to industrial production (14 per cent), employment generation (35 million persons directly – the second largest after agriculture) and foreign exchange earnings (about 24.6 per cent). It contributes 4 per cent towards GDP. It is the only industry in the country, which is self-reliant and complete in the value chain i.e., from raw material to the highest value added products.

**Cotton Textiles:** In ancient India, cotton textiles were produced with hand spinning and handloom weaving techniques. After the 18th century, power-looms came into use. Our traditional industries suffered a setback during the colonial period because they could not compete with the mill-made cloth from England.

- The first successful textile mill was established in Mumbai in 1854.
- The two world wars were fought in Europe, India was a British colony. There was a demand for cloth in U.K. hence, they gave a boost to the development of the cotton textile industry.

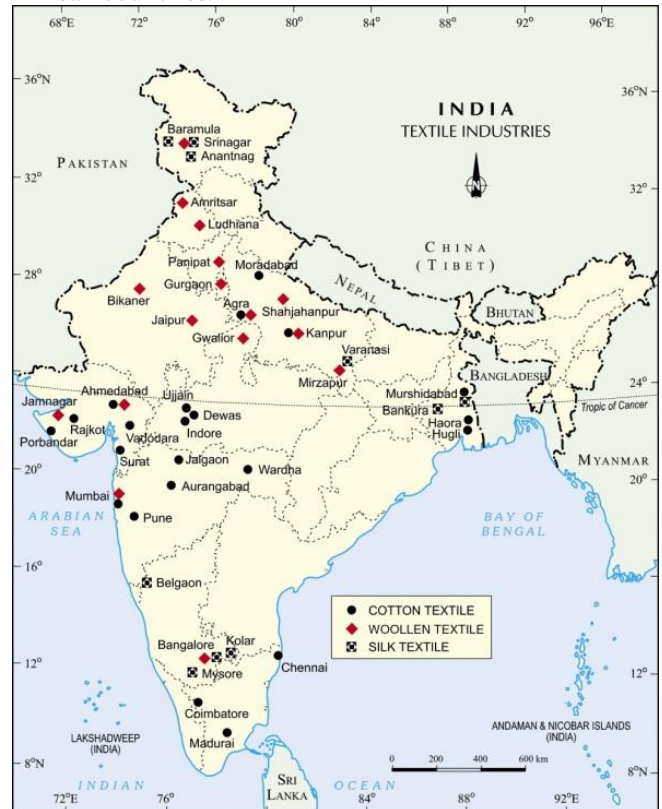
Today, there are nearly 1600 cotton and human made fibre textile mills in the country. About 80 per cent of these are in the private sector and the rest in the public and cooperative sectors. Apart from these, there are several thousand small factories with four to ten looms.

**Why did Mahatma Gandhi lay emphasis on spinning yarn and weaving khadi?**

**Why is it important for our country to keep the mill sector loomage lower than power loom and handloom?**

India exports yarn to Japan. Other importers of cotton

goods from India are U.S.A., U.K., Russia, France, East European countries, Nepal, Singapore, Sri Lanka, and African countries.



**India: Distribution of cotton, woollen and silk industries**

In the early years, the cotton textile industry was concentrated in the cotton growing belt of Maharashtra and Gujarat. Availability of raw cotton, market, transport including accessible port facilities, labour, moist climate, etc. contributed towards its localisation. This industry has close links with agriculture and provides a living to farmers, cotton boll pluckers and workers engaged in ginning, spinning, weaving, dyeing, designing, packaging, tailoring and sewing. The industry by creating demands supports many other industries, such as, chemicals and dyes, mill stores, packaging materials and engineering works.

While spinning continues to be centralised in Maharashtra, Gujarat and Tamil Nadu, weaving is highly decentralised to provide scope for incorporating traditional skills and designs of weaving in cotton, silk, zari, embroidery, etc. India has world class production in spinning, but weaving supplies low quality of fabric as it cannot use much of the high quality yarn produced in the country. Weaving is done by handloom, powerloom and in mills.

The handspun khadi provides large scale employment to weavers in their homes as a cottage industry.

India has the second largest installed capacity of spindles in the world, next to China, at around 34 million (2003-04). Since the mid-eighties, the spinning sector has received a lot of attention.

We have a large share in the world trade of cotton yarn, accounting for one fourth of the total trade. However, our trade in garments is only 4 per cent of the world's total. Our spinning mills are competitive at the global level and capable of using all the fibres we produce. The weaving, knitting and processing units cannot use much of the high quality yarn that is produced in the country. There are some large and modern factories in these segments, but most of the production is in fragmented small units, which cater to the local market. This mismatch is a major drawback for the industry. As a

result, many of our spinners export cotton yarn while apparel/garment manufactures have to import fabric.

**Why is it important for us to improve our weaving sector instead of exporting yarn in large quantities?**

Although, we have made significant increase in the production of good quality long staple cotton (9232 lakh bales in 2004-05), the need to import is still felt. Power supply is erratic and machinery needs to be upgraded in the weaving and processing sectors in particular. Other problems are the low output of labour and stiff competition with the synthetic fibre industry.

**Jute Textiles**

India is the largest producer of raw jute and jute goods and stands at second place as an exporter after Bangladesh. There are about 70 jute mills in India. Most of these are located in West Bengal, mainly along the banks of the Hugli river, in a narrow belt (98 km long and 3 km wide).

*The first jute mill was set up near Kolkata in 1859 at Rishra. After Partition in 1947, the jute mills remained in India but three-fourth of the jute producing area went to Bangladesh (erstwhile East Pakistan).*

Factors responsible for their location in the Hugli basin are: proximity of the jute producing areas, inexpensive water transport, supported by a good network of railways, roadways and waterways to facilitate movement of raw material to the mills, abundant water for processing raw jute, cheap labour from West Bengal and adjoining states of Bihar, Orissa and Uttar Pradesh. Kolkata as a large urban centre provides banking, insurance and port facilities for export of jute goods. The jute industry supports 2.61 lakh workers directly and another 40 lakhs small and marginal farmers who are engaged in cultivation of jute and mesta. Many more people are associated indirectly.

Challenges faced by the industry include stiff competition in the international market from synthetic substitutes and from other competitors like Bangladesh, Brazil, Philippines, Egypt and Thailand. However, the internal demand has been on the increase due to the Government policy of mandatory use of jute packaging. To stimulate demand, the products need to be diversified. In 2005, National Jute Policy was formulated with the objective of increasing productivity, improving quality, ensuring good prices to the jute farmers and enhancing the yield per hectare. The main markets are U.S.A., Canada, Russia, United Arab Republic, U.K. and Australia. The growing global concern for environment friendly, biodegradable materials, has once again opened the opportunity for jute products.

**Sugar Industry**

India stands second as a world producer of sugar but occupies the first place in the production of gur and khandsari. The raw material used in this industry is bulky, and in haulage its sucrose content reduces. Where should the mills be ideally located? There are over 460 sugar mills in the country spread over Uttar Pradesh, Bihar, Maharashtra, Karnataka, Tamil Nadu, Andhra Pradesh and Gujarat along with Punjab, Haryana and Madhya Pradesh. Sixty per cent mills are in Uttar Pradesh and Bihar. This industry is seasonal in nature so, it is ideally suited to the cooperative sector. Can you explain why this is so?

In recent years, there is a tendency for the mills to shift and concentrate in the southern and western states, especially in Maharashtra. This is because the cane produced here has a higher sucrose content. The cooler

climate also ensures a longer crushing season.

Moreover, the cooperatives are more successful in these states.

Major challenges include the seasonal nature of the industry, old and inefficient methods of production, transport delay in reaching cane to factories and the need to maximise the use of baggase.

**Mineral based Industries**

Industries that use minerals and metals as raw materials are called mineral based industries. Can you name some industries that would fall in this category?

**Iron and Steel Industry**

The iron and steel Industry is the basic industry since all the other industries — heavy, medium and light, depend on it for their machinery. Steel is needed to manufacture a variety of engineering goods, construction material, defence, medical, telephonic, scientific equipment and a variety of consumer goods.

Production and consumption of steel is often regarded as the index of a country's development. Iron and steel is a heavy industry because all the raw materials as well as finished goods are heavy and bulky entailing heavy transportation costs. Iron ore, coking coal and lime stone are required in the ratio of approximately 4: 2: 1. Some quantities of manganese, are also required to harden the steel. Where should the steel plants be ideally located? Remember that the finished products also need an efficient transport network for their distribution to the markets and consumers.

Today with 32.8 million tons of steel production, India ranks ninth among the world crude steel producers. It is the largest producer of sponge iron. In spite of large quantity of production of steel, per capita consumption per annum is only 32 kg.

Presently, there are 10 primary integrated and many mini steel plants in India. See the Appendix and mark these on the map of India.

Most of the public sector undertakings market their steel through Steel Authority of India Ltd. (SAIL) while TISCO markets its produce by itself in the name of Tata Steel.

In the 1950s China and India produced almost the same quantity of steel. Today, China is the largest producer of steel. China is also the world's largest consumer of steel. In 2004, India was the largest exporter of steel which accounted for 2.25 per cent of the global steel trade. Chotanagpur plateau region has the maximum concentration of iron and steel industries. It is largely, because of the relative advantages this region has for the development of this industry.





### India: Iron and Steel Plants

These include, low cost of iron ore, high grade raw materials in proximity, cheap labour and vast growth potential in the home market. Though, India is an important iron and steel producing country in the world yet, we are not able to perform to our full potential largely due to: (a) High costs and limited availability of coking coal (b) Lower productivity of labour (c) Irregular supply of energy and (d) Poor infrastructure. We also import good quality steel from other countries. However, the overall production of steel is sufficient to meet our domestic demand.

**Mini steel plants are smaller, have electric furnaces, use steel scrap and sponge iron. They have re-rollers that use steel ingots as well. They produce mild and alloy steel of given specifications.**

**An integrated steel plant is large, handles everything in one complex – from putting together raw material to steel making, rolling and shaping.**

Liberalisation and Foreign Direct Investment have given a boost to the industry with the efforts of private entrepreneurs. There is a need to allocate resources for research and development to produce steel more computatively.

### Aluminium Smelting

Aluminium smelting is the second most important metallurgical industry in India. It is light, resistant to corrosion, a good conductor of heat, malleable and becomes strong when it is mixed with other metals. It is used to manufacture aircraft, utensils and wires. It has gained popularity as a substitute of steel, copper, zinc and lead in a number of industries.

There are 8 aluminium smelting plants in the country located in Orissa (Nalco and Balco), West Bengal, Kerala, Uttar Pradesh, Chhattisgarh, Maharashtra and Tamil Nadu. In 2004, India produced over 600 million tonnes of aluminium.

Bauxite, the raw material used in the smelters is a very bulky, dark reddish coloured rock. The flow chart given

below shows the process of manufacturing aluminium. Regular supply of electricity and an assured source of raw material at minimum cost are the two prime factors for location of the industry.

### Chemical Industries

The Chemical industry in India is fast growing and diversifying. It contributes approximately 3 per cent of the GDP. It is the third largest in Asia and occupies the twelfth place in the world in term of its size. It comprises both large and small scale manufacturing units. Rapid growth has been recorded in both inorganic and organic sectors. Inorganic chemicals include sulphuric acid (used to manufacture fertilisers, synthetic fibres, plastics, adhesives, paints, dyes stuffs), nitric acid, alkalis, soda ash (used to make glass, soaps and detergents, paper) and caustic soda. These industries are widely spread over the country. Why do you think it is so?

Organic chemicals include petrochemicals, which are used for manufacturing of synthetic fibers, synthetic rubber, plastics, dye-stuffs, drugs and pharmaceuticals. Organic chemical plants are located near oil refineries or petrochemical plants.

The chemical industry is its own largest consumer. Basic chemicals undergo processing to further produce other chemicals that are used for industrial application, agriculture or directly for consumer markets. Make a list of the products you are aware of.

### Fertiliser Industry

The fertiliser industry is centred around the production of nitrogenous fertilisers (mainly urea), phosphatic fertilisers and ammonium phosphate (DAP) and complex fertilisers which have a combination of nitrogen (N), phosphate (P), and potash (K). The third, i.e. potash is entirely imported as the country does not have any reserves of commercially usable potash or potassium compounds in any form. India is the third largest producer of nitrogenous fertilisers. There are 57 fertiliser units manufacturing nitrogenous and complex nitrogenous fertilisers, 29 for urea and 9 for producing ammonium sulphate as a by-product and 68 other small units produce single superphosphate. At present, there are 10 public sector undertakings and one in cooperative sector at Hazira in Gujarat under the Fertiliser Corporation of India.

After the Green Revolution the industry expanded to several other parts of the country. Gujarat, Tamil Nadu, Uttar Pradesh, Punjab and Kerala contribute towards half the fertiliser production. Other significant producers are Andhra Pradesh, Orissa, Rajasthan, Bihar, Maharashtra, Assam, West Bengal, Goa, Delhi, Madhya Pradesh and Karnataka.

### Cement Industry

Cement is essential for construction **Activity** such as building houses, factories, bridges, roads, airports, dams and for other commercial establishments. This industry requires bulky and heavy raw materials like limestone, silica, alumina and gypsum. Coal and electric power are needed apart from rail transportation.

The industry has strategically located plants in Gujarat that have suitable access to the market in the Gulf countries.

The first cement plant was set up in Chennai in 1904. After Independence the industry expanded. Decontrol of price and distribution since 1989 and other policy reforms led the cement industry to make rapid strides in capacity, process, technology and production. There are 128 large plants and 332 mini cement plants in the country. India produces a variety of cement.

Improvement in the quality has found the produce a readily available market in East Asia, Middle East, Africa and South Asia apart from a large demand within the country. This industry is doing well in terms of production as well as export. Efforts are being made to generate adequate domestic demand and supply in order to sustain this industry.

### Automobile Industry

Automobiles provide vehicle for quick transport of good services and passengers. Trucks, buses, cars, motor cycles, scooters, three-wheelers and multi-utility vehicles are manufactured in India at various centres. After the liberalisation, the coming in of new and contemporary models stimulated the demand for vehicles in the market, which led to the healthy growth of the industry including passenger cars, two and three-wheelers. This industry had experienced a quantum jump in less than 15 years. Foreign Direct Investment brought in new technology and aligned the industry with global developments. At present, there are 15 manufacturers of passenger cars and multi-utility vehicles, 9 of commercial vehicles, 14 of the two and three-wheelers. The industry is located around Delhi, Gurgaon, Mumbai, Pune, Chennai, Kolkata, Lucknow, Indore, Hyderabad, Jamshedpur and Bangalore.

### Information Technology and Electronics Industry

The electronics industry covers a wide range of products from transistor sets to television, telephones, cellular telecom, pagers, telephone exchange, radars, computers and many other equipments required by the telecommunication industry. Bangalore has emerged as the electronic capital of India. Other important centres for electronic goods are Mumbai, Delhi, Hyderabad, Pune, Chennai, Kolkata, Lucknow and Coimbatore. 18 software technology parks provide single window service and high data communication facility to software experts. A major impact of this industry has been on employment generation. Upto 31 March 2005, the IT industry employed over one million persons. This number is expected to increase eight-fold in the next 3 to 4 years. It is encouraging to know that 30 per cent of the people employed in this sector are women. This industry has been a major foreign exchange earner in the last two or three years because of its fast growing Business Processes Outsourcing (BPO) sector. The continuing growth in the hardware and software is the key to the success of IT industry in India.

### Industrial Pollution and Environmental Degradation

Although industries contribute significantly to India's economic growth and development, the increase in pollution of land, water, air, noise and resulting degradation of environment that they have caused, cannot be overlooked. Industries are responsible for four types of pollution: (a) Air (b) Water (c) Land (d) Noise. The polluting industries also include thermal power plants.

Air pollution is caused by the presence of high proportion of undesirable gases, such as sulphur dioxide and carbon monoxide. Air-borne particulate materials contain both solid and liquid particles like dust, sprays mist and smoke. Smoke is emitted by chemical and paper factories, brick kilns, refineries and smelting plants, and burning of fossil fuels in big and small factories that ignore pollution norms. Toxic gas leaks can be very hazardous with long-term effects. Are you aware of the Bhopal Gas tragedy that occurred? Air pollution adversely affects human health, animals, plants, buildings and the atmosphere as a whole.

Water pollution is caused by organic and inorganic industrial wastes and effluents discharged into rivers. The main culprits in this regard are paper, pulp, chemical, textile and dyeing, petroleum refineries, tanneries and electroplating industries that let out dyes, detergents, acids, salts and heavy metals like lead and mercury pesticides, fertilisers, synthetic chemicals with carbon, plastics and rubber, etc. into the water bodies. Fly ash, phospo- gypsum and iron and steel slags are the major solid wastes in India.



### India: Software Technology Parks

Thermal pollution of water occurs when hot water from factories and thermal plants is drained into rivers and ponds before cooling. What would be the effect on aquatic life?

Wastes from nuclear power plants, nuclear and weapon production facilities cause cancers, birth defects and miscarriages. Soil and water pollution are closely related. Dumping of wastes specially glass, harmful chemicals, industrial effluents, packaging, salts and garbage renders the soil useless. Rain water percolates to the soil carrying the pollutants to the ground and the ground water also gets contaminated.

Noise pollution not only results in irritation and anger, it can also cause hearing impairment, increased heart rate and blood pressure among other physiological effects. Unwanted sound is an irritant and a source of stress.

Industrial and construction activities, machinery, factory equipment, generators, saws and pneumatic and electric drills also make a lot of noise.

### Control of Environmental Degradation

Every litre of waste water discharged by our industry pollutes eight times the quantity of freshwater. How can the industrial pollution of fresh water be reduced? Some suggestions are-

- (i) minimising use water for processing by reusing and recycling it in two or more successive stages
  - (ii) harvesting of rainwater to meet water requirements
  - (iii) treating hot water and effluents before releasing them in rivers and ponds. Treatment of industrial effluents can be done in three phases
- (a) Primary treatment by mechanical means. This

involves screening, grinding, flocculation and sedimentation.

(b) Secondary treatment by biological process

(c) Tertiary treatment by biological, chemical and physical processes. This involves recycling of wastewater.

Overdrawing of ground water reserves by industry where there is a threat to ground water resources also needs to be regulated legally. Particulate matter in the air can be reduced by fitting smoke stacks to factories with electrostatic precipitators, fabric filters, scrubbers and inertial separators. Smoke can be reduced by using oil or gas instead of coal in factories. Machinery and equipment can be used and generators should be fitted with silencers. Almost all machinery can be redesigned to increase energy efficiency and reduce noise. Noise absorbing material may be used apart from personal use of earplugs and earphones.

The challenge of sustainable development requires integration of economic development with environmental concerns.

### **NTPC shows the way**

*NTPC is a major power providing corporation in India. It has ISO certification for EMS (Environment Management System) 14001. The corporation has a proactive approach for preserving the natural environment and resources like water, oil and gas and fuels in places where it is setting up power plants. This has been possible through-*

*(a) Optimum utilisation of equipment adopting latest techniques and upgrading existing equipment.*

*(b) Minimising waste generation by maximising ash utilisation.*

*(c) Providing green belts for nurturing ecological balance and addressing the question of special purpose vehicles for afforestation.*

*(d) Reducing environmental pollution through ash pond management, ash water recycling system and liquid waste management.*

*(e) Ecological monitoring, reviews and on-line database management for all its power stations.*

## **Chapter 7** **Lifelines Of National Economy**

We use different materials and services in our daily life. Some of these are available in our immediate surroundings, while other requirements are met by bringing things from other places. Goods and services do not move from supply locales to demand locales on their own. The movement of these goods and services from their supply locations to demand locations necessitates the need for transport. Some people are engaged in facilitating these movements. These are known to be traders who make the products come to the consumers by transportation. Thus, the pace of development of a country depends upon the production of goods and services as well as their movement over space. Therefore, efficient means of transport are pre-requisites for fast development.

Movement of these goods and services can be over three important domains of our earth i.e. land, water and air. Based on these, transport can also be classified into land, water and air transport.

For a long time, trade and transport were restricted to a limited space. With the development in science and technology, the area of influence of trade and transport expanded far and wide. Today, the world has been

converted into a large village with the help of efficient and fast moving transport. Transport has been able to achieve this with the help of equally developed communication system. Therefore, transport, communication and trade are complementary to each other.

Today, India is well-linked with the rest of the world despite its vast size, diversity and linguistic and socio-cultural plurality. Railways, airways, water ways, newspapers, radio, television, cinema and internet, etc. have been contributing to its socio-economic progress in many ways. The trades from local to international levels have added to the vitality of its economy. It has enriched our life and added substantially to growing amenities and facilities for the comforts of life.

In this chapter, you will see how modern means of transport and communication serve as life lines of our nation and its modern economy. It is thus, evident that a dense and efficient network of transport and communication is a pre-requisite for local, national and global trade of today.

### **TRANSPORT** **Roadways**

India has one of the largest road networks in the world, aggregating to about 2.3 million km at present. In India, roadways have preceded railways. They still have an edge over railways in view of the ease with which they can be built and maintained. The growing importance of road transport vis-à-vis rail transport is rooted in the following reasons; (a) construction cost of roads is much lower than that of railway lines, (b) roads can traverse comparatively more dissected and undulating topography, (c) roads can negotiate higher gradients of slopes and as such can traverse mountains such as the Himalayas, (d) road transport is economical in transportation of few persons and relatively smaller amount of goods over short distances, (e) it also provides door-to-door service, thus the cost of loading and unloading is much lower, (f) road transport is also used as a feeder to other modes of transport such as they provide a link between railway stations, air and sea ports.

In India, roads are classified in the following six classes according to their capacity. Look at the map of the National Highways and find out about the significant role played by these roads.

- **Golden Quadrilateral Super Highways:** The government has launched a major road development project linking Delhi-Kolkata-Chennai-Mumbai and Delhi by six-lane Super Highways. The North-South corridors linking Srinagar (Jammu & Kashmir) and Kanyakumari (Tamil Nadu), and East-West Corridor connecting Silcher (Assam) and Porbander (Gujarat) are part of this project. The major objective of these Super Highways is to reduce the time and distance between the mega cities of India. These highway projects are being implemented by the National Highway Authority of India (NHAI).

#### **Do You Know**

Do you know that National Highway-7 is the longest and traverses 2,369 km between Varanasi and Kanyakumari via Jabalpur, Nagpur, Hyderabad, Bangalore and Madurai. Delhi and Mumbai are connected by National Highway-8, while National Highway-15 covers most of Rajasthan.

- **National Highways:** National Highways link extreme parts of the country. These are the primary road systems and are laid and maintained by the Central Public Works Department (CPWD). A number of major National



Highways run in North-South and East-West directions. The historical Sher-Shah Suri Marg is called National Highway No.1, between Delhi and Amritsar.

- **State Highways:** Roads linking a state capital with different district headquarters are known as State Highways. These roads are constructed and maintained by the State Public Works Department (PWD) in State and Union Territories.

- **District Roads:** These roads connect the district headquarters with other places of the district. These roads are maintained by the Zila Parishad.

- **Other Roads:** Rural roads, which link rural areas and villages with towns, are classified under this category. These roads received special impetus under the Pradhan Mantri Grameen Sadak Yojana. Under this scheme special provisions are made so that every village in the country is linked to a major town in the country by an all season motorable road.

- **Border Roads:** Apart from these, Border Roads Organisation a Government of India undertaking constructs and maintains roads in the bordering areas of the country. This organisation was established in 1960 for the development of the roads of strategic importance in the northern and north-eastern border areas. These roads have improved accessibility in areas of difficult terrain and have helped in the economic development of these area.

Roads can also be classified on the basis of the type of material used for their construction such as metalled and unmetalled roads. Metalled roads may be made of cement, concrete or even bitumen of coal, therefore, these are all weather roads. Unmetalled roads go out of use in the rainy season.

### Road Density

The length of road per 100 sq. km of area is known as density of roads. Distribution of road is not uniform in the country. Density of all roads varies from only 10 km in Jammu & Kashmir to 375 km in Kerala with the national average of 75 km (1996-97). Road transportation in India faces a number of problems. Keeping in view the volume of traffic and passengers, the road network is inadequate. About half of the roads are unmetalled and this limits their usage during the rainy season. The National Highways are inadequate too. Moreover, the roadways are highly congested in cities and most of the bridges and culverts are old and narrow.

### Railways

Railways are the principal mode of transportation for freight and passengers in India. Railways also make it possible to conduct multifarious activities like business, sightseeing, pilgrimage along with transportation of goods over longer distances. Apart from an important means of transport the Indian Railways have been a great integrating force for more than 150 years. Railways in India bind the economic life of the country as well as accelerate the development of the industry and agriculture. The Indian Railway have a network of 7, 031 stations spread over a route length of 63, 221 km. with a fleet of 7817 locomotives, 5321 passenger service vehicles, 4904 other coach vehicles and 228, 170 wagons as on 31 March 2004.

*The Indian Railways is the largest public sector undertaking in the country. The first train steamed off from Mumbai to Thane in 1853, covering a distance of 34 km.*

The Indian Railway is now reorganised into 16 zones. The distribution pattern of the Railway network in the country has been largely influenced by physiographic,

economic and administrative factors. The northern plains with their vast level land, high population density and rich agricultural resources provided the most favourable condition for their growth. However, a large number of rivers requiring construction of bridges across their wide beds posed some obstacles. In the hilly terrains of the peninsular region, railway tracts are laid through low hills, gaps or tunnels. The Himalayan mountainous regions too are unfavourable for the construction of railway lines due to high relief, sparse population and lack of economic opportunities. Likewise, it was difficult to lay railway lines on the sandy plain of western Rajasthan, swamps of Gujarat, forested tracks of Madhya Pradesh, Chhattisgarh, Orissa and Jharkhand. The contiguous stretch of Sahyadri could be crossed only through gaps or passes (Ghats). In recent times, the development of the Konkan railway along the west coast has facilitated the movement of passengers and goods in this most important economic region of India. It has also faced a number of problem such as sinking of track in some stretches and land slides. Today, the railways have become more important in our national economy than all other means of transport put together. However, rail transport suffers from certain problems as well. Many passengers travel without tickets. Thefts and damaging of railway property has not yet stopped completely. People stop the trains, pull the chain unnecessarily and this causes heavy damage to the railway. Think over it, how we can help our railway in running as per the scheduled time?

### Pipelines

Pipeline transport network is a new arrival on the transportation map of India. In the past, these were used to transport water to cities and industries. Now, these are used for transporting crude oil, petroleum products and natural gas from oil and natural gas fields to refineries, fertilizer factories and big thermal power plants. Solids can also be transported through a pipeline when converted into slurry. The far inland locations of refineries like Barauni, Mathura, Panipat and gas based fertilizer plants could be thought of only because of pipelines. Initial cost of laying pipelines is high but subsequent running costs are minimal. It rules out trans-shipment losses or delays.

There are three important networks of pipeline transportation in the country.

- From oil field in upper Assam to Kanpur (Uttar Pradesh), via Guwahati, Barauni and Allahabad. It has branches from Barauni to Haldia, via Rajbandh, Rajbandh to Maurigram and Guwahati to Siliguri.
- From Salaya in Gujarat to Jalandhar in Punjab, via Viramgam, Mathura, Delhi and Sonipat. It has branches to connect Koyali (near Vadodara, Gujarat) Chakshu and other places.
- Gas pipeline from Hazira in Gujarat connects Jagdishpur in Uttar Pradesh, via Vijaipur in Madhya Pradesh. It has branches to Kota in Rajasthan, Shahajahanpur, Babrala and other places in Uttar Pradesh.

### Waterways

Since time immemorial, India was one of the seafaring countries. Its seamen sailed far and near, thus, carrying and spreading Indian commerce and culture.

Waterways are the cheapest means of transport. They are most suitable for carrying heavy and bulky goods. It is a fuel-efficient and environment friendly mode of transport. India has inland navigation waterways of 14,500 km in length. Out of these only 3,700 km are navigable by mechanised boats. The following

waterways have been declared as the National Waterways by the Government.

- The Ganga river between Allahabad and Haldia (1620 km)-N.W. No.1
- The Brahmaputra river between Sadiya and Dhubri (891 km)-N.W. No.2
- The West-Coast Canal in Kerala (Kottapurma-Komman, Udyogamandal and Champakkara canals-205 km) – N.W. No.3

The other viable inland waterways include the Godavari, Krishna, Barak, Sunderbans, Buckingham Canal, Brahmani, East-west Canal and Damodar Valley Corporation Canal.

Apart from these, India's trade with foreign countries is carried from the ports located along the coast. 95 per cent of the country's trade volume (68 per cent in terms of value) is moved by sea.

### Major Sea Ports

With a long coastline of 7,516.6 km, India is dotted with 12 major and 181 medium and minor ports. These major ports handle 95 per cent of India's foreign trade. Kandla in Kutch was the first port developed soon after Independence to ease the volume of trade on the Mumbai port, in the wake of loss of Karachi port to Pakistan after the Partition. Kandla is a tidal port. It caters to the convenient handling of exports and imports of highly productive granary and industrial belt stretching across the states of Jammu and Kashmir, Himachal Pradesh, Punjab, Haryana, Rajasthan and Gujarat.

Mumbai is the biggest port with a spacious natural and well-sheltered harbour. The Jawaharlal Nehru port was planned with a view to decongest the Mumbai port and serve as a hub port for this region. Marmagao port (Goa) is the premier iron ore exporting port of the country. This port accounts for about fifty per cent of India's iron ore export. New Mangalore port, located in Karnataka caters to the export of iron ore concentrates from Kudremukh mines. Kochchi is the extreme south-western port, located at the entrance of a lagoon with a natural harbour.

Moving along the east coast, you would see the extreme south-eastern port of Tuticorin, in Tamil Nadu. This port has a natural harbour and rich hinterland. Thus, it has a flourishing trade handling of a large variety of cargoes to even our neighbouring countries like Sri Lanka, Maldives, etc. and the coastal regions of India. Chennai is one of the oldest artificial ports of the country. It is ranked next to Mumbai in terms of the volume of trade and cargo. Vishakhapatnam is the deepest landlocked and well-protected port. This port was, originally, conceived as an outlet for iron ore exports. Paradwip port located in Orissa, specialises in the export of iron ore. Kolkata is an inland riverine port. This port serves a very large and rich hinterland of Ganga- Brahmaputra basin. Being a tidal port, it requires constant dredging of Hoogly. Haldia port was developed as a subsidiary port, in order to relieve growing pressure on the Kolkata port.

### Airways

The air travel, today, is the fastest, most comfortable and prestigious mode of transport. It can cover very difficult terrains like high mountains, dreary deserts, dense forests and also long oceanic stretches with great ease. Think of the north-eastern part of the country, marked with the presence of big rivers, dissected relief, dense forests and frequent floods and international frontiers, etc. in the absence of air transport. Air travel has made access easier.

The air transport was nationalised in 1953. On the operational side, Indian Airlines, Alliance Air (subsidiary of Indian Airlines), private scheduled airlines and non-scheduled operators provide domestic air services. Air India provides international air services. Pawan Hans Helicopters Ltd. provides helicopter services to Oil and Natural Gas Corporation in its off-shore operations, to inaccessible areas and difficult terrains like the north-eastern states and the interior parts of Jammu and Kashmir, Himachal Pradesh and Uttarakhand. Indian Airlines operations also extend to the neighbouring countries of South and south-east Asia and the Middle East.

*Find out the names of the countries connected by Indian Airlines.*

Air travel is not within the reach of the common people. It is only in the north-eastern states that special provisions are made to extend the services to the common people.

### Communication

Ever since humans appeared on the earth, they have used different means of communication. But, the pace of change, has been rapid in modern times. Long distance communication is far easier without physical movement of the communicator or receiver. Personal communication and mass communication including television, radio, press, films, etc. are the major means of communication in the country. The Indian postal network is the largest in the world. It handles parcels as well as personal written communications. Cards and envelopes are considered first-class mail and are airlifted between stations covering both land and air. The second-class mail includes book packets, registered newspapers and periodicals. They are carried by surface mail, covering land and water transport. To facilitate quick delivery of mails in large towns and cities, six mail channels have been introduced recently. They are called Rajdhani Channel, Metro Channel, Green Channel, Business Channel, Bulk Mail Channel and Periodical Channel.

India has one of the largest telecom networks in Asia. Excluding urban places more than two-thirds of the villages in India have already been covered with Subscriber Trunk Dialling (STD) telephone facility. In order to strengthen the flow of information from the grassroot to the higher level, the government has made special provision to extend twenty-four hours STD facility to every village in the country. There is a uniform rate of STD facilities all over India. It has been made possible by integrating the development in space technology with communication technology. Mass communication provides entertainment and creates awareness among people about various national programmes and policies. It includes radio, television, newspapers, magazines, books and films. All India Radio (Akashwani) broadcasts a variety of programmes in national, regional and local languages for various categories of people, spread over different parts of the country. Doordarshan, the national television channel of India, is one of the largest terrestrial networks in the world. It broadcasts a variety of programmes from entertainment, educational to sports, etc. for people of different age groups.

India publishes a large number of newspapers and periodicals annually. They are of different types depending upon their periodicity. Newspapers are published in about 100 languages and dialects. Did you know that the largest number of newspapers published in the country are in Hindi, followed by English and

Urdu? India is the largest producer of feature films in the world. It produces short films; video feature films and video short films. The Central Board of Film Certification is the authority to certify both Indian and foreign films.

### International Trade

The exchange of goods among people, states and countries is referred to as trade. The market is the place where such exchanges take place. Trade between two countries is called international trade. It may take place through sea, air or land routes. While local trade is carried in cities, towns and villages, state level trade is carried between two or more states. Advancement of international trade of a country is an index to its economic prosperity. It is, therefore, considered the economic barometer for a country.

As the resources are space bound, no country can survive without international trade. Export and import are the components of trade. The balance of trade of a country is the difference between its export and import. When the value of export exceeds the value of imports, it is called a favourable balance of trade. On the contrary, if the value of imports exceeds the value of exports, it is termed as unfavourable balance of trade. India has trade relations with all the major trading blocks and all geographical regions of the world. Among the commodities of export, whose share has been increasing over the last few years till 2004-05 are agriculture and allied products (2.53 per cent), ores and minerals (9.12 per cent), gems and jewellery (26.75 per cent) and chemical and allied products (24.45 per cent), engineering goods (35.63 per cent) and petroleum products (86.12 per cent).

The commodities imported to India include petroleum and petroleum products (41.87 per cent), pearls and precious stones (29.26 per cent), inorganic chemicals

(29.39 per cent), coal, coke and briquettes (94.17 per cent), machinery (12.56 per cent). Bulk imports as a group registered a growth accounting for 39.09 per cent of total imports. This group includes fertilizers (67.01 per cent), cereals (25.23 per cent), edible oils (7.94 per cent) and newsprint (5.51 per cent). International trade has undergone a sea change in the last fifteen years. Exchange of commodities and goods have been superseded by the exchange of information and knowledge. India has emerged as a software giant at the international level and it is earning large foreign exchange through the export of information technology.

### Tourism as a Trade

Tourism in India has grown substantially over the last three decades. Foreign tourist's arrivals in the country witnessed an increase of 23.5 per cent during the year 2004 as against the year 2003, thus contributing Rs 21,828 crore of foreign exchange.

Over 2.6 million foreign tourists visit India every year. More than 15 million people are directly engaged in the tourism industry. Tourism also promotes national integration, provides support to local handicrafts and cultural pursuits. It also helps in the development of international understanding about our culture and heritage. Foreign tourists visit India for heritage tourism, eco tourism, adventure tourism, cultural tourism, medical tourism and business tourism.

Rajasthan, Goa, Jammu and Kashmir and temple towns of south India are important destinations of foreign tourists in India. There is vast potential of tourism development in the north-eastern states and the interior parts of Himalayas, but due to strategic reasons these have not been encouraged so far. However, there lies a bright future ahead for this upcoming industry.



# NCERT Class 11

## Geography Physical

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 Geography As A Discipline

##### Topic-1 Geography As An Integrated Discipline, Physical Geography And Natural Sciences, Geography And Social Sciences.

Geography should be studied as an independent subject as it helps us to gather knowledge about the physical environment of the Earth, human activities and their interactive relationships. As a student of geography, we should be curious to know about all the phenomena which vary over space. Through the study of geography, we get to know about the diverse lands and people. We also need to understand the changes that have taken place over time. Geography equips us to appreciate diversity and investigate into the causes responsible for creating such variations over time and space. We develop skills to understand the globe converted into maps and have a visual sense of the Earth's surface.

- We need to understand as to 'What is geography?'. In very simple words, it can be said that geography is the description of the Earth. The term 'geography' was first coined by **Eratostrhenes**, a Greek scholar (276-194 BC). The word has been derived from two roots of Greek language geo (Earth) and graphos (description). Put together, they mean description of the Earth.
- Geography is different from other sciences in its subject matter and methodology but at the same time, it is closely related to other disciplines. Geography derives its data base from all the natural and social sciences and attempts their synthesis.

- Geography as a discipline is concerned with three sets of questions: Some questions are concerned with the identification of the patterns of natural and cultural features over the surface of Earth. These are the questions about 'what'? The second type of questions are concerned with the distribution of the natural and human/cultural features over the surface of the Earth. These are the questions about 'where'? The third type of question is related to the explanation or the casual relationships between features and the processes and phenomena.

- As a social science discipline, geography studies the 'spatial organisation' and 'spatial integration.'
- Geography is a discipline of synthesis. It attempts spatial synthesis, and history attempts temporal synthesis. Its approach is holistic in nature. It recognises the fact that the world is a system of interdependencies. Every discipline, concerned with scientific knowledge is linked with geography as many of their elements vary over space. Geography helps in understanding the reality in its spatial perspective.

##### Topic-2 Branches Of Geography - Physical Geography, Human Geography,

##### Biogeography, Branches Of Geography Based On Regional Approach, Physical Geography And Its Importance.

- We all know that geography is an interdisciplinary subject of study. The major approach to the study of geography have been Systematic and Regional
- The systematic geography was introduced by Alexander Von Humboldt, a German geographer and the regional geography was by a contemporary of Humboldt, Karl Ritter.

- In the systematic approach, a phenomenon is studied world-wide as a whole, and then the identification of typologies or spatial patterns is done.

- In the regional approach, the world is divided into regions at different hierarchical levels and then all the geographical phenomena in a particular region are studied. These regions may be natural, political or designated region.

- Branches of geography (based on systematic approach):

**Physical Geography:** Geomorphology: It is devoted to the study of landforms and their evolution. Climatology: It is the study of the structure of atmosphere. Hydrology: It studies the realm of water over the surface of the earth. Soil Geography: It is the study of the processes of soil formation, types, etc.

**Human Geography:** Social/cultural Geography: It is the study of society and its spatial dynamics. Population and Settlement Geography: It studies population growth, distribution, density, sex ratio, migration and occupational structure, etc. Economic Geography: It studies the activities of the people. Historical Geography: It studies the historical processes through which the space gets organised. Political Geography: It looks at the space from the angle of political events and studies boundaries, etc., to understand the political behaviour of the population.

**Biogeography:** Plant Geography: It studies the spatial pattern of natural vegetation in their habitats. Zoo Geography: It studies the spatial patterns and geographical characteristics of animals and their habitats. Ecosystem: It deals with the scientific study of the habitats characteristics of species. Environmental Geography: It studies the leading environmental problems such as land gradation, pollution and concerns for conservation of environment.

**Branches of geography (based on regional approach):** Regional Studies/Area Studies: It comprises of Macro, Meso and Micro regional studies. Regional Planning: It comprises of country/rural and town/urban planning. Regional Development Regional Analysis Physical geography includes the study of lithosphere (landforms, drainage, relief and physiography), atmosphere, hydrosphere and biosphere. Each element of the physical geography is important for human beings. Landforms provide the base on which the human activities are located. The climate influences our house types, clothing, food habits, vegetation,

cropping pattern, location of industries, etc. The study of physical geography is emerging as a discipline of evaluating and managing natural resources. It is important to understand the intricate relationship between physical environment and human beings.

**Important Terms Spatial Synthesis:** It includes the formal techniques which study the entities using geographical properties. **Holistic Approach:** It means the overall approach that is taken up to study the subject. **Systematic Approach:** It is a phenomenon which is studied world-wide as a whole, and then the identification of typologies or spatial patterns is done. **Regional Approach:** In this approach the world is divided into regions at different hierarchical levels and then all the geographical phenomena in a particular region are studied. These regions may be natural, political or designated region.

## Chapter 2 The Origin And Evolution Of The Earth

### Topic-1 Early Theories: Origin Of The Earth, Modern Theories: Origin Of The Universe, The Star Formation, Formation Of The Planets.

A large number of hypotheses were put forth by different philosophers and scientists regarding the origin of the earth. One of the earlier and popular arguments was by German philosopher Immanuel Kant. Mathematician Laplace revised it in 1796. It is known as Nebular Hypothesis. The hypothesis considered that the planets were formed out of a cloud of material associated with a youthful sun, which was slowly rotating.

- Later in 1900, Chamberlain and Moulton considered that a wandering star approached the sun. As a result, a cigar-shaped extension of material was separated from the solar surface.
- Sir James Jeans and later Sir Harold Jeffrey supported this argument. These arguments are called the Binary Theories. In 1950, Otto Schmidt in Russia and Carl Weizsacker in Germany somewhat revised the 'Nebular Hypothesis', though differing in details. However, scientists in later period took up the problems of origin of universe rather than that of just the earth or the planets.
- The most popular argument regarding the origin of the universe is the **Big Bang Theory**. It is also called 'Expanding Universe Hypothesis'. The Big Bang Theory considers the following stages in the development of the universe: In the beginning, all matter forming the universe existed in one place in the form of a "tiny ball" (singular atom) with an unimaginably small volume, infinite temperature and infinite density. At the Big Bang the "tiny ball" exploded violently. This led to a huge expansion. It is now generally accepted that the event of Big Bang took place 13.7 billion years before the present. The expansion continues even to the present day. As it grew, some energy was converted into matter. There was particularly rapid expansion within fractions of a second after the bang. Thereafter, the expansion has slowed down. Within first three minutes from the Big Bang event, the first atom began to form.
- Within 300,000 years from the Big Bang, temperature dropped to 4,500 K and gave rise to atomic matter. The universe became transparent. The expansion of the universe means increase in space between the galaxies.
- A galaxy contains a large number of stars. Galaxies spread over vast distances that are measured in

thousands of light years. The diameters of individual galaxies range from 80,000-150,000 light years. A galaxy starts to form by accumulation of hydrogen gas in the form of a very large cloud called nebula. Eventually, growing nebula develops localised clumps of gas. These clumps continue to grow into even denser gaseous bodies, giving rise to formation of stars. The formation of stars is believed to have taken place some 5-6 billion years ago.

The following are considered to be the stages in the development of planets: The stars are localised lumps of gas within a nebula. The gravitational force within the lumps leads to the formation of a core to the gas cloud and a huge rotating disc of gas and dust develops around the gas core. In the next stage, the gas cloud starts getting condensed and the matter around the core develops into small-rounded objects. These small-rounded objects by the process of cohesion develop into what is called planetesimals. Larger bodies start forming by collision, and gravitational attraction causes the material to stick together. Planetesimals are a large number of smaller bodies. In the final stage, these large number of small planetesimals accrete to form a few large bodies in the form of planets.

### Topic-2 Our Solar System, The Moon

- Our solar system consists of eight planets. A Pluto like dwarf planet 2003 UB<sub>313</sub> has also been recently sighted. Our solar system consists of the sun (the star), 8 planets, 63 moons, millions of smaller bodies like asteroids and comets and huge quantity of dust-grains and gases. Out of the eight planets, mercury, venus, earth and mars are called as the inner planets as they lie between the Sun and the belt of asteroids the other four planets are called the outer planets.
- Alternatively, the first four are called Terrestrial, meaning earth-like as they are made up of rock and metals, and have relatively high densities. The rest five are called Jovian or Gas Giant planets. Jovian means jupiter-like.

#### The difference between terrestrial and jovian planets can be attributed to the following conditions:

- The terrestrial planets were formed in the close vicinity of the parent star where it was too warm for gases to condense to solid particles. Jovian planets were formed at quite a distant location.
  - The solar wind was most intense nearer the sun; so, it blew off lots of gas and dust from the terrestrial planets. The solar winds were not all that intense to cause similar removal of gases from the Jovian planets.
  - The terrestrial planets are smaller and their lower gravity could not hold the escaping gases.
- All the planets were formed in the same period sometime about 4.6 billion years ago. The moon is the only natural satellite of the earth. Like the origin of the earth, there have been attempts to explain how the moon was formed. In 1838, Sir George Darwin suggested that initially, the earth and the moon formed a single rapidly rotating body.
  - However, the present scientists do not accept either of the explanations. It is now generally believed that the formation of moon, as a satellite of the earth, is an outcome of 'giant impact' or what is described as "the big splat".
  - A body of the size of one to three times that of mars collided into the earth sometime shortly after the earth was formed. It blasted a large part of the earth into space. This portion of blasted material then continued





## Chapter 3

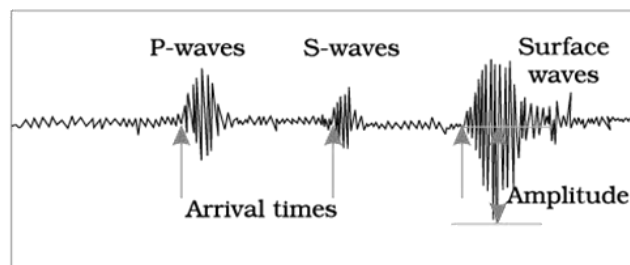
### Interior Of The Earth

The configuration of the surface of the earth is largely a product of the processes operating in the interior of the earth. It is interesting to know how scientists have gathered information about these layers and what are the characteristics of each of these layers. The earth's radius is 6,370 km. No one can reach the centre of the earth. Most of our knowledge about the interior of the earth is largely based on estimates and inferences. Yet, a part of the information is obtained through direct observations and analysis of materials.

- The most easily available solid earth material is surface rock or the rocks we get from mining areas. Besides mining, scientists have taken up a number of projects to penetrate deeper depths to explore the conditions in the crustal portions. Scientists world over are working on two major projects such as "Deep Ocean Drilling Project" and "Integrated Ocean Drilling Project".
- Volcanic eruption forms another source of obtaining direct information. As and when the molten material (magma) is thrown onto the surface of the earth, during volcanic eruption it becomes available for laboratory analysis. Analysis of properties of matter indirectly provides information about the interior.
- Another source of information are the meteors that at times reach the earth. However, it may be noted that the material that becomes available for analysis from meteors, is not from the interior of the earth. The material and the structure observed in the meteors are similar to that of the earth. They are solid bodies developed out of materials same as, or similar to, our planet. Hence, this becomes yet another source of information about the interior of the earth.
- The other indirect sources include gravitation, magnetic field, and seismic activity (earthquake). An earthquake in simple words is shaking of the earth. It is a natural event. It is caused due to release of energy, which generates waves that travel in all directions.
- The point where the energy is released is called the focus of an earthquake, alternatively, it is called the hypocentre. The energy waves travelling in different directions reach the surface. The point on the surface, nearest to the focus, is called epicentre. An instrument called 'seismograph' records the waves reaching the surface.

### Earthquake Waves

All natural earthquakes take place in the lithosphere. It is sufficient to note here that the lithosphere refers to the portion of depth up to 200 km from the surface of the earth. An instrument called 'seismograph' records the waves reaching the surface. Note that the curve shows three distinct sections each representing different types of wave patterns. Earthquake waves are basically of two types — body waves and surface waves. Body waves are generated due to the release of energy at the focus and move in all directions travelling through the body of the earth. Hence, the name body waves. The body waves interact with the surface rocks and generate new set of waves called surface waves. These waves move along the surface. The velocity of waves changes as they travel through materials with different densities. The denser the material, the higher is the velocity. Their direction also changes as they reflect or refract when coming across materials with different densities.



Earthquake Waves

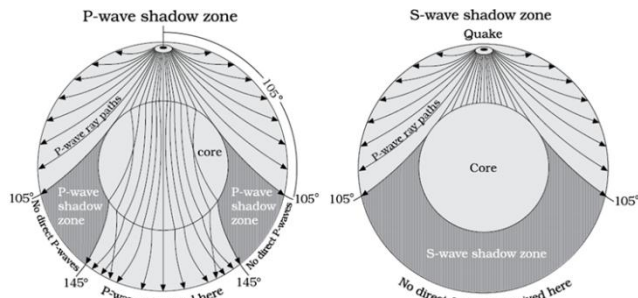
There are two types of body waves. They are called P and S-waves. P-waves move faster and are the first to arrive at the surface. These are also called 'primary waves'. The P-waves are similar to sound waves. They travel through gaseous, liquid and solid materials. S-waves arrive at the surface with some time lag. These are called secondary waves. An important fact about S-waves is that they can travel only through solid materials. This characteristic of the S-waves is quite important. It has helped scientists to understand the structure of the interior of the earth. Reflection causes waves to rebound whereas refraction makes waves move in different directions. The variations in the direction of waves are inferred with the help of their record on seismograph. The surface waves are the last to report on seismograph. These waves are more destructive. They cause displacement of rocks, and hence, the collapse of structures occurs.

### Propagation Of Earthquake Waves

Different types of earthquake waves travel in different manners. As they move or propagate, they cause vibration in the body of the rocks through which they pass. P-waves vibrate parallel to the direction of the wave. This exerts pressure on the material in the direction of the propagation. As a result, it creates density differences in the material leading to stretching and squeezing of the material. Other three waves vibrate perpendicular to the direction of propagation. The direction of vibrations of S-waves is perpendicular to the wave direction in the vertical plane. Hence, they create troughs and crests in the material through which they pass. Surface waves are considered to be the most damaging waves.

### Emergence Of Shadow Zone

Earthquake waves get recorded in seismo-graphs located at far off locations. However, there exist some specific areas where the waves are not reported. Such a zone is called the 'shadow zone'. The study of different events reveals that for each earthquake, there exists an altogether different shadow zone. (a) and (b) show the shadow zones of P and S-waves. It was observed that seismographs located at any distance within  $105^\circ$  from the epicentre, recorded the arrival of both P and S-waves. However, the seismographs located beyond  $145^\circ$  from epicentre, record the arrival of P-waves, but not that of S-waves. Thus, a zone between  $105^\circ$  and  $145^\circ$  from epicentre was identified as the shadow zone for both the types of waves. The entire zone beyond  $105^\circ$  does not receive S-waves. The shadow zone of S-wave is much larger than that of the P-waves. The shadow zone of P-waves appears as a band around the earth between  $105^\circ$  and  $145^\circ$  away from the epicentre. The shadow zone of S-waves is not only larger in extent but it is also a little over 40 per cent of the earth surface. You can draw the shadow zone for any earthquake provided you know the location of the epicentre.



(a) and (b): Earthquake Shadow Zones

## Types Of Earthquakes

- (i) The most common ones are the tectonic earthquakes. These are generated due to sliding of rocks along a fault plane.
- (ii) A special class of tectonic earthquake is sometimes recognised as volcanic earthquake. However, these are confined to areas of active volcanoes.
- (iii) In the areas of intense mining activity, sometimes the roofs of underground mines collapse causing minor tremors. These are called collapse earthquakes.
- (iv) Ground shaking may also occur due to the explosion of chemical or nuclear devices. Such tremors are called explosion earthquakes.
- (v) The earthquakes that occur in the areas of large reservoirs are referred to as reservoir induced earthquakes.

## Measuring Earthquakes

The earthquake events are scaled either according to the magnitude or intensity of the shock. The magnitude scale is known as the Richter scale. The magnitude relates to the energy released during the quake. The magnitude is expressed in absolute numbers, 0-10. The intensity scale is named after Mercalli, an Italian seismologist. The intensity scale takes into account the visible damage caused by the event. The range of intensity scale is from 1-12.

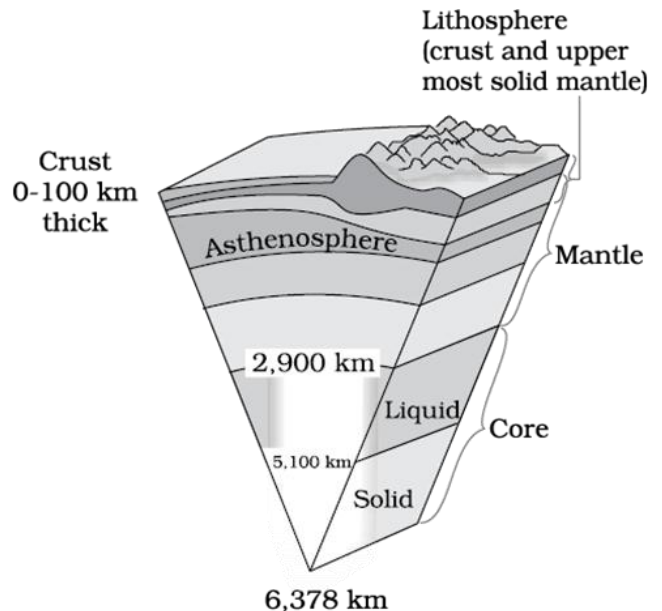
## Effects Of Earthquake

Earthquake is a natural hazard. The following are the immediate hazardous effects of earthquake:

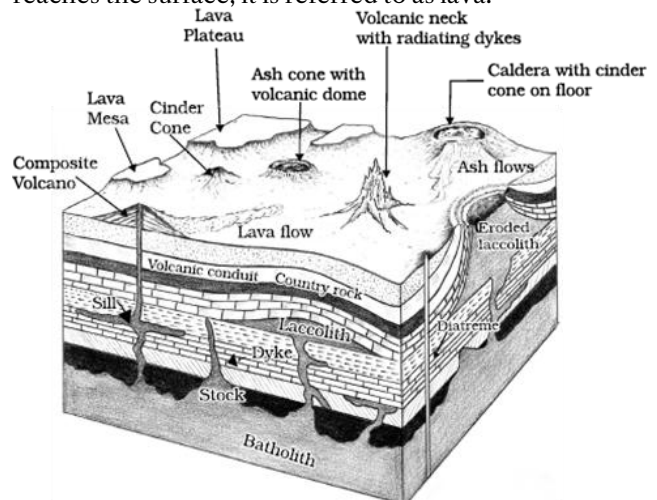
- (i) Ground Shaking (ii) Differential ground settlement
- (iii) Land and mud slides (iv) Soil liquefaction (v) Ground lurching (vi) Avalanches (vii) Ground displacement (viii) Floods from dam and levee failures
- (ix) Fires (x) Structural collapse (xi) Falling objects (xii) Tsunami

## Structure Of The Earth

The crust is the outermost solid part of the earth. It is brittle in nature. The thickness of the crust varies under the oceanic and continental areas. Oceanic crust is thinner as compared to the continental crust. The mean thickness of oceanic crust is 5 km whereas that of the continental is around 30 km.



- The portion of the interior beyond the crust is called the mantle. The upper portion of the mantle is called asthenosphere. The word 'astheno' means weak. It is considered to be extending upto 400 km. The crust and the uppermost part of the mantle are called lithosphere. Its thickness ranges from 10-200 km. The lower mantle extends beyond the asthenosphere. It is in solid state.
- The core-mantle boundary is located at the depth of 2,900 km. The outer core is in liquid state while the inner core is in solid state. The density of material at the mantle core boundary is around 5g and at the centre of the earth at 6,300 km, the density value is around 13g/cm<sup>3</sup>.
- The core is made up of very heavy material mostly constituted by nickel and iron. It is sometimes referred to as the nife layer.
- A volcano is a place where gases, ashes and/or molten rock material – lava – escape to the ground. A volcano is called an active volcano if the materials mentioned are being released or have been released out in the recent past. The layer below the solid crust is mantle. It has higher density than that of the crust. The mantle contains a weaker zone called asthenosphere.
- The material in the upper mantle portion is called magma. Once it starts moving towards the crust or it reaches the surface, it is referred to as lava.



- Barring the basalt flows, the shield volcanoes are the largest of all the volcanoes on the earth. These volcanoes are mostly made up of basalt, a type of lava that is very fluid when erupted.
- Composite volcanoes are characterised by eruptions of cooler and more viscous lavas than basalt. These

volcanoes often result in explosive eruptions.

- Caldera are the most explosive of the earth's volcanoes. They are usually so explosive that when they erupt, they tend to collapse on themselves rather than building any tall structure.
- Flood basalt provinces volcanoes outpour highly fluid lava that flows for long distances. Some parts of the world are covered by thousands of sq km of thick basalt lava flows.
- Mid-ocean ridge volcanoes occur in the oceanic areas. There is a system of mid-ocean ridges more than 70,000 km long that stretches through all the ocean basins.
- The lava that is released during volcanic eruptions on cooling develops into igneous rocks.
- Batholiths is a large body of magmatic material that cools in the deeper depth of the crust develops in the form of large domes. They appear on the surface only after the denudation processes remove the overlying materials.
- Lacoliths are large dome-shaped intrusive bodies with a level base and connected by a pipe-like conduit from below.
- The near horizontal bodies of the intrusive igneous rocks are called sill or sheet, depending on the thickness of the material.
- As and when the lava moves upwards, a portion of the same may tend to move in a horizontal direction wherever it finds a weak plane. It may get rested in different forms. In case it develops into a saucer shape, concave to the sky body, it is called lapolith.
- When the lava makes its way through cracks and the fissures developed in the land, it solidifies almost perpendicular to the ground. It gets cooled in the same position to develop a wall-like structure. Such structures are called dykes.

**Important Terms Gravity Anomalies:** The differences in readings from the expected values is called gravity anomaly. Gravity anomalies give us information about the distribution of mass of the material in the crust of the earth. **Asthenosphere:** The upper portion of the mantle is called asthenosphere.

## Chapter 4 Distribution Of Oceans And Continents

The positions of the continents and the ocean bodies are not the same what is at present but changing. If this is so, the question arises what were their positions in the past? Why and how do they change their positions? Even if it is true that the continents and oceans have changed and are changing their positions, you may wonder as to how scientists know this. How have they determined their earlier positions? You will find the answers to some of these and related questions in this chapter.

### Continental Drift

Observe the shape of the coastline of the Atlantic Ocean. You will be surprised by the symmetry of the coastlines on either side of the ocean. No wonder, many scientists thought of this similarity and considered the possibility of the two Americas, Europe and Africa, to be once joined together. It was Alfred Wegener—a German meteorologist who put forth a comprehensive argument in the form of “the continental drift theory” in 1912. This was regarding the distribution of the oceans and the continents.

According to Wegener, all the continents formed a single continental mass and mega ocean surrounded the

same. The super continent was named PANGAEA, which meant all earth. The mega-ocean was called PANTHALASSA, meaning all water. He argued that, around 200 million years ago, the super continent, Pangaea, began to split. Pangaea first broke into two large continental masses as Laurasia and Gondwanaland forming the northern and southern components respectively. Subsequently, Laurasia and Gondwanaland continued to break into various smaller continents that exist today. A variety of evidence was offered in support of the continental drift. Some of these are given below.

### Evidence In Support Of The Continental Drift

#### The Matching of Continents (Jig-Saw-Fit)

The shorelines of Africa and South America facing each other have a remarkable and unmistakable match. It may be noted that a map produced using a computer programme to find the best fit of the Atlantic margin was presented by Bullard in 1964. It proved to be quite perfect.

#### Rocks of Same Age Across the Oceans

The radiometric dating methods developed in the recent period have facilitated correlating the rock formation from different continents across the vast ocean. The belt of ancient rocks of 2,000 million years from Brazil coast matches with those from western Africa. The earliest marine deposits along the coastline of South America and Africa are of the Jurassic age. This suggests that the ocean did not exist prior to that time.

#### Tillite

It is the sedimentary rock formed out of deposits of glaciers. The Gondwana system of sediments from India is known to have its counter parts in six different landmasses of the Southern Hemisphere. At the base the system has thick tillite indicating extensive and prolonged glaciation. Counter parts of this succession are found in Africa, Falkland Island, Madagascar, Antarctica and Australia besides India. Overall resemblance of the Gondwana type sediments clearly demonstrates that these landmasses had remarkably similar histories. The glacial tillite provides unambiguous evidence of palaeoclimates and also of drifting of continents.

#### Placer Deposits

The occurrence of rich placer deposits of gold in the Ghana coast and the absolute absence of source rock in the region is an amazing fact. The gold bearing veins are in Brazil and it is obvious that the gold deposits of the Ghana are derived from the Brazil plateau when the two continents lay side by side.

#### Distribution of Fossils

When identical species of plants and animals adapted to living on land or in fresh water are found on either side of the marine barriers, a problem arises regarding accounting for such distribution. The observations that Lemurs occur in India, Madagascar and Africa led some to consider a contiguous landmass “Lemuria” linking these three landmasses. Mesosaurus was a small reptile adapted to shallow brackish water. The skeletons of these are found only in two localities: the Southern Cape province of South Africa and Iraver formations of Brazil. The two localities presently are 4,800 km apart with an ocean in between them.

### Force For Drifting

Wegener suggested that the movement responsible for the drifting of the continents was caused by pole-fleeing



force and tidal force. The polar-fleeing force relates to the rotation of the earth. You are aware of the fact that the earth is not a perfect sphere; it has a bulge at the equator. This bulge is due to the rotation of the earth. The second force that was suggested by Wegener—the tidal force—is due to the attraction of the moon and the sun that develops tides in oceanic waters. Wegener believed that these forces would become effective when applied over many million years. However, most of scholars considered these forces to be totally inadequate.

### Post-Drift Studies

It is interesting to note that for continental drift, most of the evidence was collected from the continental areas in the form of distribution of flora and fauna or deposits like tillite. A number of discoveries during the post-war period added new information to geological literature. Particularly, the information collected from the ocean floor mapping provided new dimensions for the study of distribution of oceans and continents.

### Convectional Current Theory

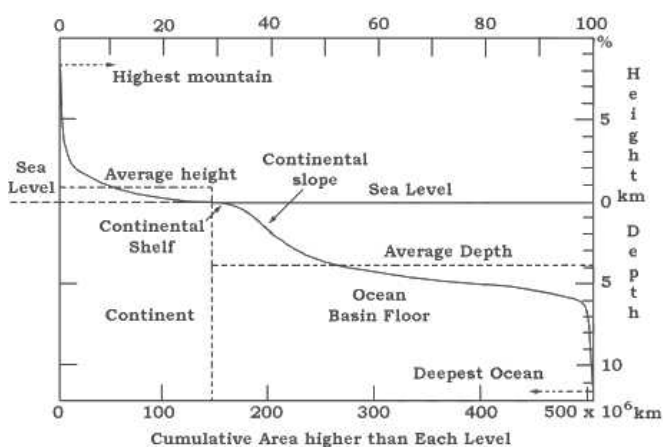
Arthur Holmes in 1930s discussed the possibility of convection currents operating in the mantle portion. These currents are generated due to radioactive elements causing thermal differences in the mantle portion. Holmes argued that there exists a system of such currents in the entire mantle portion. This was an attempt to provide an explanation to the issue of force, on the basis of which contemporary scientists discarded the continental drift theory.

### Mapping of the Ocean Floor

Detailed research of the ocean configuration revealed that the ocean floor is not just a vast plain but it is full of relief. Expeditions to map the oceanic floor in the post-war period provided a detailed picture of the ocean relief and indicated the existence of submerged mountain ranges as well as deep trenches, mostly located closer to the continent margins. The mid-oceanic ridges were found to be most active in terms of volcanic eruptions. The dating of the rocks from the oceanic crust revealed the fact that they are much younger than the continental areas. Rocks on either side of the crest of oceanic ridges and having equi-distant locations from the crest were found to have remarkable similarities both in terms of their constituents and their age.

### Ocean Floor Configuration

In this section we shall note a few things related to the ocean floor configuration that help us in the understanding of the distribution of continents and oceans.



Ocean Floor

The ocean floor may be segmented into three major divisions based on the depth as well as the forms of relief. These divisions are continental margins, deep-sea basins and mid-ocean ridges.

### Continental Margins

These form the transition between continental shores and deep-sea basins. They include continental shelf, continental slope, continental rise and deep-oceanic trenches. Of these, the deep-oceanic trenches are the areas which are of considerable interest in so far as the distribution of oceans and continents is concerned.

### Abyssal Plains

These are extensive plains that lie between the continental margins and mid-oceanic ridges. The abyssal plains are the areas where the continental sediments that move beyond the margins get deposited.

### Mid-Oceanic Ridges

This forms an interconnected chain of mountain system within the ocean. It is the longest mountain-chain on the surface of the earth though submerged under the oceanic waters. It is characterised by a central rift system at the crest, a fractionated plateau and flank zone all along its length. The rift system at the crest is the zone of intense volcanic activity. In the previous chapter, you have been introduced to this type of volcanoes as mid-oceanic volcanoes.

### Distribution Of Earthquakes And Volcanoes

Study the maps showing the distribution of seismic activity and volcanoes given in. You will notice a line of dots in the central parts of the Atlantic Ocean almost parallel to the coastlines. It further extends into the Indian Ocean. It bifurcates a little south of the Indian subcontinent with one branch moving into East Africa and the other meeting a similar line from Myanmar to New Guinea. You will notice that this line of dots coincides with the mid-oceanic ridges. The shaded belt showing another area of concentration coincides with the Alpine-Himalayan system and the rim of the Pacific Ocean. In general, the foci of the earthquake in the areas of mid-oceanic ridges are at shallow depths whereas along the Alpine-Himalayan belt as well as the rim of the Pacific, the earthquakes are deep-seated ones. The map of volcanoes also shows a similar pattern. The rim of the Pacific is also called rim of fire due to the existence of active volcanoes in this area.

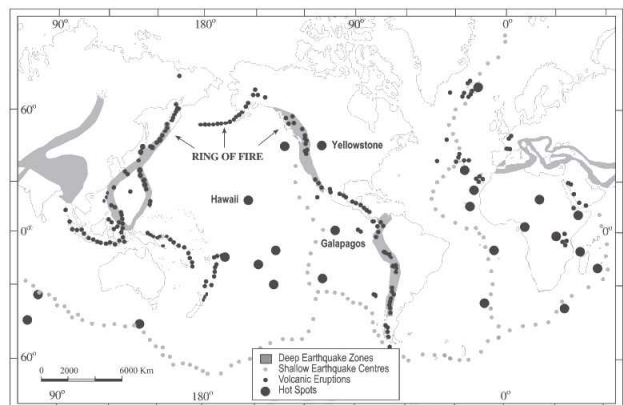


Figure 4. 2: Distribution of earthquakes and volcanoes

### Concept Of Sea Floor Spreading

As mentioned above, the post-drift studies provided considerable information that was not available at the time Wegener put forth his concept of continental drift. Particularly, the mapping of the ocean floor and palaeomagnetic studies of rocks from oceanic regions

revealed the following facts:

(i) It was realised that all along the mid-oceanic ridges, volcanic eruptions are common and they bring huge amounts of lava to the surface in this area.

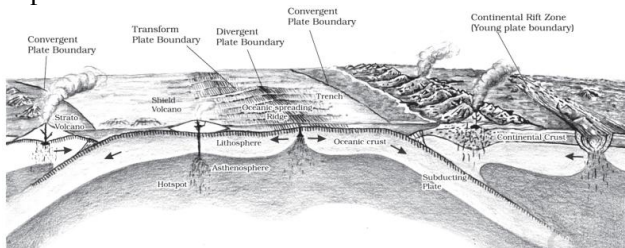
(ii) The rocks equidistant on either sides of the crest of mid-oceanic ridges show remarkable similarities in terms of period of formation, chemical compositions and magnetic properties. Rocks closer to the mid-oceanic ridges have normal polarity and are the youngest. The age of the rocks increases as one moves away from the crest.

(iii) The ocean crust rocks are much younger than the continental rocks. The age of rocks in the oceanic crust is nowhere more than 200 million years old. Some of the continental rock formations are as old as 3,200 million years.

(iv) The sediments on the ocean floor are unexpectedly very thin. Scientists were expecting, if the ocean floors were as old as the continent, to have a complete sequence of sediments for a period of much longer duration. However, nowhere was the sediment column found to be older than 200 million years.

(v) The deep trenches have deep-seated earthquake occurrences while in the mid-oceanic ridge areas, the quake foci have shallow depths.

These facts and a detailed analysis of magnetic properties of the rocks on either sides of the mid-oceanic ridge led Hess (1961) to propose his hypothesis, known as the “sea floor spreading”. Hess argued that constant eruptions at the crest of oceanic ridges cause the rupture of the oceanic crust and the new lava wedges into it, pushing the oceanic crust on either side. The ocean floor, thus spreads. The younger age of the oceanic crust as well as the fact that the spreading of one ocean does not cause the shrinking of the other, made Hess think about the consumption of the oceanic crust. He further maintained that the ocean floor that gets pushed due to volcanic eruptions at the crest, sinks down at the oceanic trenches and gets consumed. The basic concept of sea floor spreading has been depicted in.

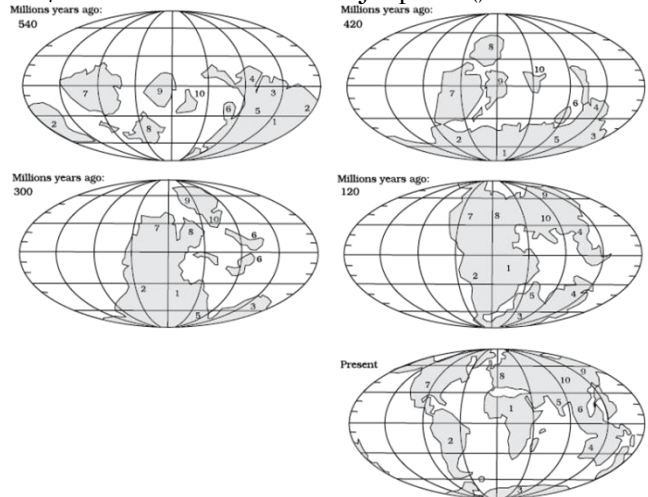


Sea floor spreading

## Plate Tectonics

Since the advent of the concept of sea floor spreading, the interest in the problem of distribution of oceans and continents was revived. It was in 1967, McKenzie and Parker and also Morgan, independently collected the available ideas and came out with another concept termed Plate Tectonics. A tectonic plate (also called lithospheric plate) is a massive, irregularly-shaped slab of solid rock, generally composed of both continental and oceanic lithosphere. Plates move horizontally over the asthenosphere as rigid units. The lithosphere includes the crust and top mantle with its thickness range varying between 5-100 km in oceanic parts and about 200 km in the continental areas. A plate may be referred to as the continental plate or oceanic plate depending on which of the two occupy a larger portion of the plate. Pacific plate is largely an oceanic plate whereas the Eurasian plate may be called a continental

plate. The theory of plate tectonics proposes that the earth's lithosphere is divided into seven major and some minor plates. Young Fold Mountain ridges, trenches, and/or faults surround these major plates ().



: Position of continents through geological past

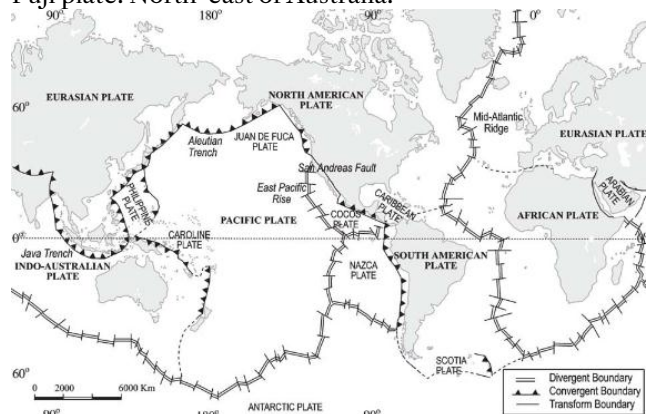
The motions of the continents during the past 540 million years. 1. Africa; 2. South America; 3. Antarctica; 4. Australia; 5. India; 6. China; 7. North America; 8. Europe; 9. and 10. Siberia (Emilani, 1992)

The major plates are as follows:

(i) Antarctica and the surrounding oceanic plate (ii) North American (with western Atlantic floor separated from the South American plate along the Caribbean islands) plate (iii) South American (with western Atlantic floor separated from the North American plate along the Caribbean islands) plate (iv) Pacific plate (v) India-Australia-New Zealand plate (vi) Africa with the eastern Atlantic floor plate (vii) Eurasia and the adjacent oceanic plate.

Some important minor plates are listed below:

(i) Cocos plate: Between Central America and Pacific plate (ii) Nazca plate: Between South America and Pacific plate (iii) Arabian plate: Mostly the Saudi Arabian landmass (iv) Philippine plate: Between the Asiatic and Pacific plate (v) Caroline plate: Between the Philippine and Indian plate (North of New Guinea) (vi) Fiji plate: North-east of Australia.



: Major and minor plates of the world

These plates have been constantly moving over the globe throughout the history of the earth. It is not the continent that moves as believed by Wegener. Continents are part of a plate and what moves is the plate. Moreover, it may be noted that all the plates, without exception, have moved in the geological past, and shall continue to move in the future as well. Wegener had thought of all the continents to have initially existed as a super continent in the form of Pangaea. However, later discoveries reveal that the continental masses, resting on the plates, have been wandering all through the geological period, and

Pangaea was a result of converging of different continental masses that were parts of one or the other plates. Scientists using the palaeomagnetic data have determined the positions held by each of the present continental landmass in different geological periods. Position of the Indian sub-continent (mostly Peninsular India) is traced with the help of the rocks analysed from the Nagpur area.

**There are three types of plate boundaries:**

### **Divergent Boundaries**

Where new crust is generated as the plates pull away from each other. The sites where the plates move away from each other are called spreading sites. The best-known example of divergent boundaries is the Mid-Atlantic Ridge. At this, the American Plate(s) is/are separated from the Eurasian and African Plates.

### **Convergent Boundaries**

Where the crust is destroyed as one plate dived under another. The location where sinking of a plate occurs is called a subduction zone. There are three ways in which convergence can occur. These are: (i) between an oceanic and continental plate; (ii) between two oceanic plates; and (iii) between two continental plates.

### **Transform Boundaries**

Where the crust is neither produced nor destroyed as the plates slide horizontally past each other. Transform faults are the planes of separation generally perpendicular to the mid-oceanic ridges. As the eruptions do not take all along the entire crest at the same time, there is a differential movement of a portion of the plate away from the axis of the earth. Also, the rotation of the earth has its effect on the separated blocks of the plate portions.

*How do you think the rate of plate movement is determined?*

### **Rates Of Plate Movement**

The strips of normal and reverse magnetic field that parallel the mid-oceanic ridges help scientists determine the rates of plate movement. These rates vary considerably. The Arctic Ridge has the slowest rate (less than 2.5 cm/yr), and the East Pacific Rise near Easter Island, in the South Pacific about 3,400 km west of Chile, has the fastest rate (more than 15 cm/yr).

### **Force For The Plate Movement**

The fact that the plates move is now a well-accepted fact. The mobile rock beneath the rigid plates is believed to be moving in a circular manner. The heated material rises to the surface, spreads and begins to cool, and then sinks back into deeper depths. This cycle is repeated over and over to generate what scientists call a convection cell or convective flow. Heat within the earth comes from two main sources: radioactive decay and residual heat. Arthur Holmes first considered this idea in the 1930s, which later influenced Harry Hess' thinking about seafloor spreading. The slow movement of hot, softened mantle that lies below the rigid plates is the driving force behind the plate movement.

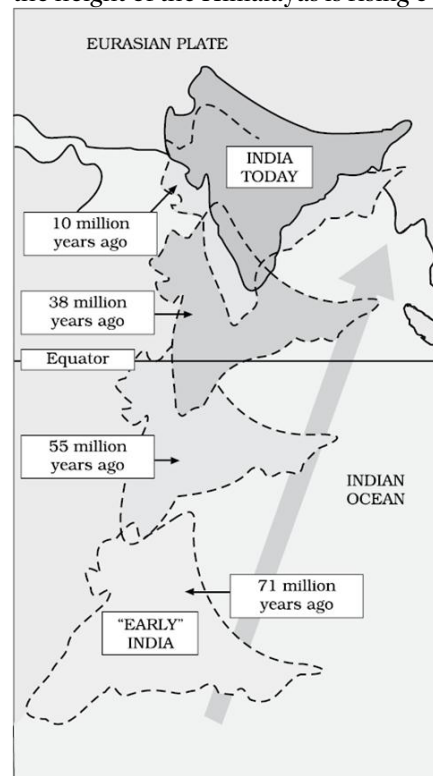
### **Movement Of The Indian Plate**

The Indian plate includes Peninsular India and the Australian continental portions. The subduction zone along the Himalayas forms the northern plate boundary in the form of continent—continent convergence. In the east, it extends through Rakinyoma Mountains of Myanmar towards the island arc along the Java Trench. The eastern margin is a spreading site lying to the east of Australia in the form of an oceanic ridge in SW Pacific.

The Western margin follows Kirthar Mountain of Pakistan. It further extends along the Makrana coast and joins the spreading site from the Red Sea rift southeastward along the Chagos Archipelago. The boundary between India and the Antarctic plate is also marked by oceanic ridge (divergent boundary) running in roughly W-E direction and merging into the spreading site, a little south of New Zealand.

India was a large island situated off the Australian coast, in a vast ocean. The Tethys Sea separated it from the Asian continent till about 225 million years ago. India is supposed to have started her northward journey about 200 million years ago at the time when Pangaea broke. India collided with Asia about 40-50 million years ago causing rapid uplift of the Himalayas. The positions of India since about 71 million years till the present are shown in the.

It also shows the position of the Indian subcontinent and the Eurasian plate. About 140 million years before the present, the subcontinent was located as south as 50°S latitude. The two major plates were separated by the Tethys Sea and the Tibetan block was closer to the Asiatic landmass. During the movement of the Indian plate towards the Asiatic plate, a major event that occurred was the outpouring of lava and formation of the Deccan Traps. This started somewhere around 60 million years ago and continued for a long period of time. Note that the subcontinent was still close to the equator. From 40 million years ago and thereafter, the event of formation of the Himalayas took place. Scientists believe that the process is still continuing and the height of the Himalayas is rising even to this date.



*Movement of the Indian plate*

## **Chapter 5 Minerals And Rocks**

The earth is composed of various kinds of elements. About 98 per cent of the total crust of the earth is composed of eight elements like oxygen, silicon, aluminium, iron, calcium, sodium, potassium and magnesium and the rest is constituted by titanium,



hydrogen, phosphorous, manganese, sulphur, carbon, nickel and other elements.

Sl. No.	Elements	By Weight(%)
1.	Oxygen	46.60
2.	Silicon	27.72
3.	Aluminium	8.13
4.	Iron	5.00
5.	Calcium	3.63
6.	Sodium	2.83
7.	Potassium	2.59
8.	Magnesium	2.09
9.	Others	1.41

The elements in the earth's crust are rarely found exclusively but are usually combined with other elements to make various substances. These substances are recognised as minerals. Thus, a mineral is a naturally occurring inorganic substance, having an orderly atomic structure and a definite chemical composition and physical properties.

- Though the number of elements making up the lithosphere are limited they are combined in many different ways to make up many varieties of minerals. Almost all the commonly occurring ones are related to six major mineral groups that are known as major rock forming minerals.

- The basic source of all minerals is the hot magma in the interior of the earth. When magma cools, crystals of minerals appear and a systematic series of minerals are formed in sequence to solidify so as to form rocks. Minerals such as coal, petroleum and natural gas are organic substances found in solid, liquid and gaseous forms respectively.

- Some important characteristics of the minerals are: **External crystal form:** Determined by internal arrangement of the molecules — cubes, octahedrons, hexagonal prisms, etc. **Cleavage:** Tendency to break in given directions producing relatively plane surfaces.

**Fracture:** Internal molecular arrangement so complex the crystal will break in an irregular manner. **Lustre:** Appearance of a material without regard to colour; each mineral has a distinctive lustre like metallic, silky, glossy, etc. **Colour:** Some minerals have characteristic colour determined by their molecular structure. **Streak:** Colour of the ground powder of any mineral. It may be of the same colour as the mineral or may differ.

**Transparency:** Some minerals might be transparent, translucent or opaque. **Structure:** Particular arrangement of the individual crystals; fine, medium or coarse grained; fibrous — separable, divergent, radiating. **Hardness:** Some minerals are measured on the basis of their hardness. **Specific gravity:** The ratio between the weight of a given object and the weight of an equal volume of water.

- Some major minerals and their characteristics are as follows: **Feldspar:** Half of the earth's crust is composed of feldspar. It has light cream to salmon pink colour. It is used in ceramics and glass making. **Quartz:** It is one of the most important components of sand and granite. It is white or colourless and used in radio and radar. **Pyroxene:** It forms 10 per cent of the earth's crust. It is commonly found in meteorites. It is in green or black colour. **Amphibole:** They form 7 per cent of the earth's crust. It is in green or black colour and is used in asbestos industry. **Mica:** It is commonly found in igneous and metamorphic rocks. It is used in electrical instruments. **Olivine:** It is used in jewellery. It is usually a greenish crystal, often found in basaltic rocks.

**Metallic Minerals:** These minerals contain metal

content and can be sub-divided into three types:

**Precious metals:** Gold, silver, platinum, etc. **Ferrous metals:** Iron and other metals often mixed with iron to form various kinds of steel. **Non-ferrous metals:**

Include metals like copper, lead, zinc, tin, aluminium, etc. **Non-Metallic Minerals:** These minerals do not contain metal content. Sulphur, phosphates and nitrates are examples of non-metallic minerals. Cement is a mixture of non-metallic minerals.

### Non-Metallic Minerals

These minerals do not contain metal content. Sulphur, phosphates and nitrates are examples of non-metallic minerals. Cement is a mixture of non-metallic minerals. The earth's crust is composed of rocks. A rock is an aggregate of one or more minerals. Rocks may be hard or soft and in varied colours. Rocks do not have definite composition of mineral constituents. Feldspar and quartz are the most common minerals found in rocks. As there is a close relation between rocks and landforms, rocks and soils; a geographer requires basic knowledge of rocks.

- There are many different kinds of rocks which are grouped under three families on the basis of their mode of formation. They are:

- **Igneous Rocks:** Solidified from magma and lava. As igneous rocks form out of magma and lava from the interior of the earth, they are known as primary rocks. The igneous rocks are formed when magma cools and solidifies. When magma in its upward movement cools and turns into solid form it is called igneous rock. Granite, gabbro, pegmatite, basalt, volcanic breccia and tuff are some of the examples of igneous rocks.

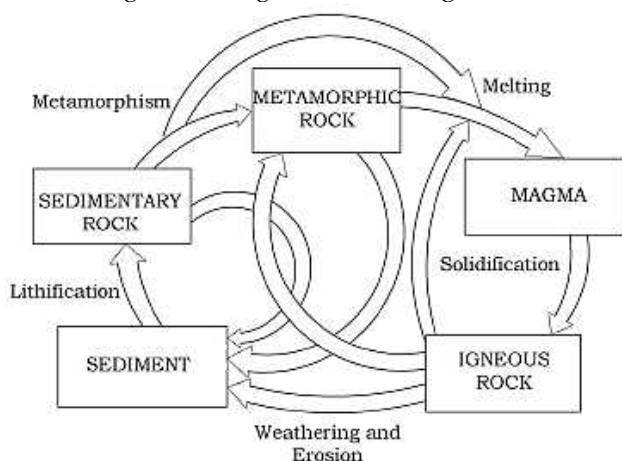
- **Sedimentary Rocks:** The result of deposition of fragments of rocks by exogenous processes. The word 'sedimentary' is derived from the Latin word sedimentum, which means settling.

- **Metamorphic Rocks:** Formed out of existing rocks undergoing recrystallisation. The word metamorphic means 'change of form'. These rocks form under the action of pressure, volume and temperature (PVT) changes. Metamorphism is a process by which already consolidated rocks undergo recrystallisation and reorganisation of materials within original rocks. Mechanical disruption and reorganisation of the original minerals within rocks due to breaking and crushing without any appreciable chemical changes is called **dynamic metamorphism**. The materials of rocks chemically alter and recrystallise due to thermal metamorphism. In regional metamorphism, rocks undergo recrystallisation due to deformation caused by tectonic shearing together with high temperature or pressure or both. In the process of metamorphism in some rocks grains or minerals get arranged in layers or lines. Such an arrangement of minerals or grains in metamorphic rocks is called **foliation or lineation**.

Sometimes minerals or materials of different groups are arranged into alternating thin to thick layers appearing in light and dark shades. Such a structure in metamorphic rocks is called banding and rocks displaying banding are called banded rocks. Metamorphic rocks are classified into two major groups: foliated rocks and non-foliated rocks.

Rocks (igneous, sedimentary and metamorphic) of the earth's surface are exposed to denudation agents, and are broken up into various sizes of fragments. Such fragments are transported by different exogenous agencies and deposited. These deposits through compaction turn into rocks. This process is called **lithification**.

- Depending upon the mode of formation, sedimentary rocks are classified into three major groups:
- Mechanically formed:** Sandstone, conglomerate, limestone, shale, loess, etc., are examples.
- Organically formed:** Geyserite, chalk, limestone, coal, etc., are some examples.
- Chemically formed:** Chert, limestone, halite, potash, etc., are some examples.
- Rocks do not remain in their original form for long but may undergo transformation. Rock cycle is a continuous process through which old rocks are transformed into new ones.
- Igneous rocks are primary rocks and other rocks (sedimentary and metamorphic) form from these primary rocks. Igneous rocks can be changed into metamorphic rocks. The fragments derived out of igneous and metamorphic rocks form into sedimentary rocks. Sedimentary rocks themselves can turn into fragments and the fragments can be a source for formation of sedimentary rocks. The crustal rocks (igneous, metamorphic and sedimentary) once formed may be carried down into the mantle (interior of the earth) through subduction process (parts or whole of crustal plates going down under another plate in zones of plate convergence) and the same melt down due to increase in temperature in the interior and turn into molten magma, the original source for igneous rocks.



**Important Terms** **Rock cycle:** Rock cycle is a continuous process through which old rocks are transformed into new ones. **Petrology:** Petrology is science of rocks. **Lithification:** It is a process in which unconsolidated sediments are converted into solid stone or rock. **Metamorphism:** It is the process by which the rocks are changed in composition, texture or structure by extreme heat and pressure. **Foliation:** It refers to repetitive layering in metamorphic rocks. **Dynamic metamorphism:** Mechanical disruption and reorganisation of the original minerals within rocks due to breaking and crushing without any appreciable chemical changes is called dynamic metamorphism. **Contact metamorphism:** In contact metamorphism the rocks come in contact with hot intruding magma and lava and the rock materials recrystallise under high temperatures. **Banding:** Sometimes minerals or materials of different groups are arranged into alternating thin to thick layers appearing in light and dark shades. Such a structure in metamorphic rocks is called banding. **Banding rocks:** Rocks displaying banding are called banded rocks.

## Chapter 6 Geomorphic Processes

### Why is the surface of the earth uneven?

The earth's crust is dynamic. You are well aware that it has moved and moves vertically and horizontally. The differences in the internal forces operating from within

the earth which built up the crust have been responsible for the variations in the outer surface of the crust. The earth's surface is being continuously subjected to external forces induced basically by energy (sunlight). Of course, the internal forces are still active though with different intensities. That means, the earth's surface is being continuously subjected to by external forces originating within the earth's atmosphere and by internal forces from within the earth. The external forces are known as exogenic forces and the internal forces are known as endogenic forces. The actions of exogenic forces result in wearing down (degradation) of relief/elevations and filling up (aggradation) of basins/depressions, on the earth's surface. The phenomenon of wearing down of relief variations of the surface of the earth through erosion is known as gradation. The endogenic forces continuously elevate or build up parts of the earth's surface and hence the exogenic processes fail to even out the relief variations of the surface of the earth. So, variations remain as long as the opposing actions of exogenic and endogenic forces continue. In general terms, the endogenic forces are mainly land building forces and the exogenic processes are mainly land wearing forces.

### Geomorphic Processes

The endogenic and exogenic forces causing changes in the configuration of the surface of the earth are known as geomorphic processes. Diastrophism and volcanism are endogenic geomorphic processes. Weathering, mass wasting, erosion and deposition are exogenic geomorphic processes. Any exogenic element of nature (like water, ice, wind, etc.,) capable of acquiring and transporting earth materials can be called a geomorphic agent. When these elements of nature become mobile due to gradients, they remove the materials and transport them over slopes and deposit them at lower level. Geomorphic processes and geomorphic agents especially exogenic, unless stated separately, are one and the same.

A process is a force applied on earth materials affecting the same. An agent is a mobile medium (like running water, moving ice masses, wind, waves and currents etc.) which removes, transports and deposits earth materials. Running water, groundwater, glaciers, wind, waves and currents, etc., can be called geomorphic agents.

Do you think it is essential to distinguish geomorphic agents and geomorphic processes?

Gravity besides being a directional force activating all downslope movements of matter also causes stresses on the earth's materials. Without gravity and gradients there would be no mobility and hence no erosion, transportation and deposition are possible. So, gravitational stresses are as important as the other geomorphic processes. Gravity is the force that switches on the movement of all surface material on earth. All the movements either within the earth or on the surface of the earth occur due to gradients — from higher levels to lower levels, from high pressure to low pressure areas etc.

### Endogenic Processes

The energy emanating from within the earth is the main force behind endogenic geomorphic processes. This energy is mostly generated by radioactivity, rotational and tidal friction and primordial heat from the origin of the earth. This energy due to geothermal gradients and heat flow from within induces diastrophism and volcanism in the lithosphere. Due to variations in

geothermal gradients and heat flow from within, crustal thickness and strength, the action of endogenic forces are not uniform and hence the tectonically controlled original crustal surface is uneven.

## Diastrophism

All processes that move, elevate or build up portions of the earth's crust come under diastrophism. They include: (i) orogenic processes involving mountain building through severe folding and affecting long and narrow belts of the earth's crust; (ii) epeirogenic processes involving uplift or warping of large parts of the earth's crust; (iii) earthquakes involving local relatively minor movements; (iv) plate tectonics involving horizontal movements of crustal plates. In the process of orogeny, the crust is severely deformed into folds. Due to epeirogeny, there may be simple deformation. Orogeny is a mountain building process whereas epeirogeny is continental building process. Through the processes of orogeny, epeirogeny, earthquakes and plate tectonics, there can be faulting and fracturing of the crust. All these processes cause pressure, volume and temperature (PVT) changes which in turn induce metamorphism of rocks.

*Epeirogeny and orogeny, cite the differences.*

## Volcanism

Volcanism includes the movement of molten rock (magma) onto or toward the earth's surface and also formation of many intrusive and extrusive volcanic forms. Many aspects of volcanism have already been dealt in detail in previous chapter.

*What do the words volcanism and volcanoes indicate?*

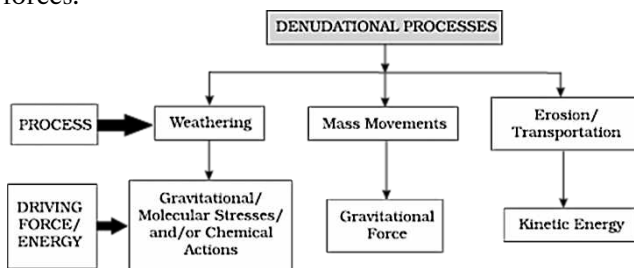
## Exogenic Processes

The exogenic processes derive their energy from atmosphere determined by the ultimate energy from the sun and also the gradients created by tectonic factors.

*Why do you think that the slopes or gradients are created by tectonic factors?*

As there are different climatic regions on the earth's surface the exogenic geomorphic processes vary from region to region. Temperature and precipitation are the two important climatic elements that control various processes.

All the exogenic geomorphic processes are covered under a general term, denudation. The word 'denude' means to strip off or to uncover. Weathering, mass wasting/movements, erosion and transportation are included in denudation. The flow chart (i) gives the denudation processes and their respective driving forces.



### Denudational processes and their driving forces

As there are different climatic regions on the earth's surface owing to thermal gradients created by latitudinal, seasonal and land and water spread variations, the exogenic geomorphic processes vary from region to region.

The density, type and distribution of vegetation which largely depend upon precipitation and temperature exert influence indirectly on exogenic geomorphic processes. Within different climatic regions there may

be local variations of the effects of different climatic elements due to altitudinal differences, aspect variations and the variation in the amount of insolation received by north and south facing slopes as compared to east and west facing slopes. Further, due to differences in wind velocities and directions, amount and kind of precipitation, its intensity, the relation between precipitation and evaporation, daily range of temperature, freezing and thawing frequency, depth of frost penetration, the geomorphic processes vary within any climatic region.

*What is the sole driving force behind all the exogenic processes?*

Climatic factors being equal, the intensity of action of exogenic geomorphic processes depends upon type and structure of rocks. The term structure includes such aspects of rocks as folds, faults, orientation and inclination of beds, presence or absence of joints, bedding planes, hardness or softness of constituent minerals, chemical susceptibility of mineral constituents; the permeability or impermeability etc. Different types of rocks with differences in their structure offer varying resistances to various geomorphic processes. A particular rock may be resistant to one process and non-resistant to another. And, under varying climatic conditions, particular rocks may exhibit different degrees of resistance to geomorphic processes and hence they operate at differential rates and give rise to differences in topography. The effects of most of the exogenic geomorphic processes are small and slow and may be imperceptible in a short time span, but will in the long run affect the rocks severely due to continued fatigue. Finally, it boils down to one fact that the differences on the surface of the earth though originally related to the crustal evolution continue to exist in some form or the other due to differences in the type and structure of earth materials, differences in geomorphic processes and in their rates of operation.

Some of the exogenic geomorphic processes have been dealt in detail here.

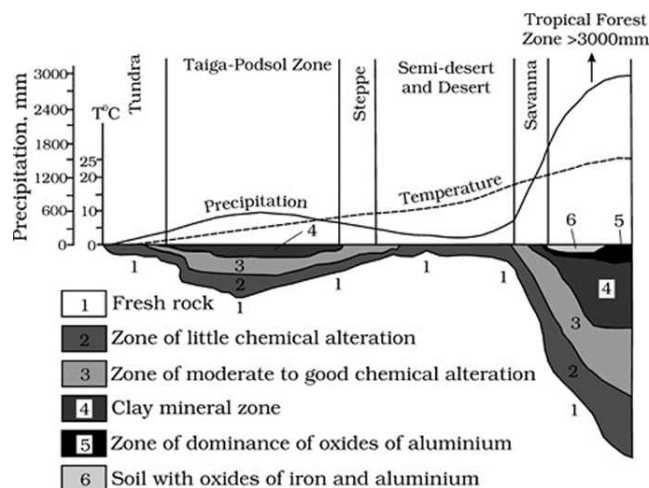
## Weathering

Weathering is action of elements of weather and climate over earth materials. Weathering is defined as mechanical disintegration and chemical decomposition of rocks through the actions of various elements of weather and climate. As very little or no motion of materials takes place in weathering, it is an in-situ or on-site process.

Is this little motion which can occur sometimes due to weathering synonymous with transportation? If not, why?

Weathering processes are conditioned by many complex geological, climatic, topographic and vegetative factors. Climate is of particular importance. Not only weathering processes differ from climate to climate, but also the depth of the weathering mantle (i).





Climatic regimes and depth of weathering mantles (adapted and modified from Strakhov, 1967)

There are three major groups of weathering processes: (i) chemical; (ii) physical or mechanical; (iii) biological weathering processes. Very rarely does any one of these processes ever operate completely by itself, but quite often a dominance of one process can be seen.

### Chemical Weathering Processes

A group of weathering processes viz; solution, carbonation, hydration, oxidation and reduction act on the rocks to decompose, dissolve or reduce them to a fine clastic state. Water and air (oxygen and carbon dioxide) along with heat must be present to speed up all chemical reactions. Over and above the carbon dioxide present in the air, decomposition of plants and animals increases the quantity of carbon dioxide underground.

#### Solution

When something is dissolved in water or acids is called solution. On coming in contact with water many solids disintegrate and mix up as suspension in water. Soluble rock forming minerals like nitrates, sulphates, and potassium etc. are affected by this process. So, these minerals are easily leached out without leaving any residue in rainy climates and accumulate in dry regions. Minerals like calcium carbonate and calcium magnesium bicarbonate present in limestones are soluble in water containing carbonic acid (formed with the addition of carbon dioxide in water), and are carried away in water as solution. Carbon dioxide produced by decaying organic matter along with soil water greatly aids in this reaction. Common salt (sodium chloride) is also a rock forming mineral and is susceptible to this process of solution.

#### Carbonation

Carbonation is the reaction of carbonate and bicarbonate with minerals and is a common process helping the breaking down of feldspars and carbonate minerals. Carbon dioxide from the atmosphere and soil air is absorbed by water, to form carbonic acid that acts as a weak acid. Calcium carbonates and magnesium carbonates are dissolved in carbonic acid and are removed in a solution without leaving any residue resulting in cave formation.

#### Hydration

Hydration is the chemical addition of water. Minerals take up water and expand; this expansion causes an increase in the volume of the material itself or rock. Calcium sulphate takes in water and turns to gypsum, which is more unstable than calcium sulphate. This process is reversible and long, continued repetition of this process causes fatigue in the rocks and may lead to

their disintegration. Many clay minerals swell and contract during wetting and drying and a repetition of this process results in cracking of overlying materials. Salts in pore spaces undergo rapid and repeated hydration and help in rock fracturing. The volume changes in minerals due to hydration will also help in physical weathering through exfoliation and granular disintegration.

### Oxidation and Reduction

In weathering, oxidation means a combination of a mineral with oxygen to form oxides or hydroxides. Oxidation occurs where there is ready access to the atmosphere and oxygenated waters. The minerals most commonly involved in this process are iron, manganese, sulphur etc. In the process of oxidation rock breakdown occurs due to the disturbance caused by addition of oxygen. Red colour of iron upon oxidation turns to brown or yellow. When oxidised minerals are placed in an environment where oxygen is absent, reduction takes place. Such conditions exist usually below the water table, in areas of stagnant water and waterlogged ground. Red colour of iron upon reduction turns to greenish or bluish grey.

These weathering processes are inter-related.

Hydration, carbonation and oxidation go hand in hand and hasten the weathering process.

Can we give iron rusting as an example of oxidation?

How essential is water in chemical weathering processes? Can chemical weathering processes dominate in water scarce hot deserts?

### Physical Weathering Processes

Physical or mechanical weathering processes depend on some applied forces. The applied forces could be: (i) gravitational forces such as overburden pressure, load and shearing stress; (ii) expansion forces due to temperature changes, crystal growth or animal activity; (iii) water pressures controlled by wetting and drying cycles. Many of these forces are applied both at the surface and within different earth materials leading to rock fracture. Most of the physical weathering processes are caused by thermal expansion and pressure release. These processes are small and slow but can cause great damage to the rocks because of continued fatigue the rocks suffer due to repetition of contraction and expansion.

#### Unloading and Expansion

Removal of overlying rock load because of continued erosion causes vertical pressure release with the result that the upper layers of the rock expand producing disintegration of rock masses. Fractures will develop roughly parallel to the ground surface. In areas of curved ground surface, arched fractures tend to produce massive sheets or exfoliation slabs of rock. Large, smooth rounded domes called exfoliation domes () result due to this process.

#### Temperature Changes and Expansion

Various minerals in rocks possess their own limits of expansion and contraction. With rise in temperature, every mineral expands and pushes against its neighbour and as temperature falls, a corresponding contraction takes place. Because of diurnal changes in the temperatures, this internal movement among the mineral grains of the superficial layers of rocks takes place regularly. This process is most effective in dry climates and high elevations where diurnal temperature changes are drastic. The surface layers of the rocks tend to expand more than the rock at depth and this leads to the formation of stress within the rock resulting in

heaving and fracturing parallel to the surface. Due to differential heating and resulting expansion and contraction of surface layers and their subsequent exfoliation from the surface results in smooth rounded surfaces in rocks. In rocks like granites, smooth surfaced and rounded small to big boulders called tors form due to such exfoliation.

What is the difference between exfoliation domes and exfoliated tors?

### Freezing, Thawing and Frost Wedging

Frost weathering occurs due to growth of ice within pores and cracks of rocks during repeated cycles of freezing and melting. This process is most effective at high elevations in mid-latitudes where freezing and melting is often repeated. Glacial areas are subject to frost wedging daily. In this process, the rate of freezing is important. Rapid freezing of water causes its sudden expansion and high pressure. The resulting expansion affects joints, cracks and small inter granular fractures to become wider and wider till the rock breaks apart.

### Salt Weathering

Salts in rocks expand due to thermal action, hydration and crystallisation. Many salts like calcium, sodium, magnesium, potassium and barium have a tendency to expand. Expansion of these salts depends on temperature and their thermal properties. High temperature ranges between 30 and 50 C of surface temperatures in deserts favour such salt expansion. Salt crystals in near-surface pores cause splitting of individual grains within rocks, which eventually fall off. This process of falling off of individual grains may result in granular disintegration or granular foliation. Salt crystallisation is most effective of all salt-weathering processes. In areas with alternating wetting and drying conditions salt crystal growth is favoured and the neighbouring grains are pushed aside. Sodium chloride and gypsum crystals in desert areas heave up overlying layers of materials and with the result polygonal cracks develop all over the heaved surface. With salt crystal growth, chalk breaks down most readily, followed by limestone, sandstone, shale, gneiss and granite etc.

### Biological Activity And Weathering

Biological weathering is removal of minerals from the weathering environment and physical changes due to growth or movement of organisms. Burrowing and wedging by organisms like earthworms, termites, rodents etc., help in exposing the new surfaces to chemical attack and assists in the penetration of moisture and air. Human beings by disturbing vegetation, ploughing and cultivating soils, also help in mixing and creating new contacts between air, water and minerals in the earth materials. Decaying plant and animal matter help in the production of humic, carbonic and other acids which enhance decay and solubility of some elements. Plant roots exert a tremendous pressure on the earth materials mechanically breaking them apart.

### Special Effects Of Weathering

#### Exfoliation

This has already been explained under physical weathering processes of unloading, thermal contraction and expansion and salt weathering. Exfoliation is a result but not a process. Flaking off of more or less curved sheets of shells from over rocks or bedrock results in smooth and rounded surfaces. Exfoliation can occur due to expansion and contraction induced by

temperature changes. Exfoliation domes and tors result due to unloading and thermal expansion respectively.

### Significance Of Weathering

Weathering processes are responsible for breaking down the rocks into smaller fragments and preparing the way for formation of not only regolith and soils, but also erosion and mass movements. Biomes and biodiversity is basically a result of forests (vegetation) and forests depend upon the depth of weathering mantles. Erosion cannot be significant if the rocks are not weathered. That means, weathering aids mass wasting, erosion and reduction of relief and changes in landforms are a consequence of erosion. Weathering of rocks and deposits helps in the enrichment and concentrations of certain valuable ores of iron, manganese, aluminium, copper etc., which are of great importance for the national economy. Weathering is an important process in the formation of soils.

When rocks undergo weathering, some materials are removed through chemical or physical leaching by groundwater and thereby the concentration of remaining (valuable) materials increases. Without such a weathering taking place, the concentration of the same valuable material may not be sufficient and economically viable to exploit, process and refine. This is what is called enrichment.

### Mass Movements

- Mass movements transfer the mass of rock debris down the slopes under the direct influence of gravity. That means, air, water or ice do not carry debris with them from place to place but on the other hand the debris may carry with it air, water or ice. The movements of mass may range from slow to rapid, affecting shallow to deep columns of materials and include creep, flow, slide and fall.
- Mass movements are aided by gravity and no geomorphic agent like running water, glaciers, wind, waves and currents participate in the process of mass movement. Weak unconsolidated materials, thinly bedded rocks, faults, steeply dipping beds, vertical cliffs or steep slopes, abundant precipitation and torrential rains and scarcity of vegetation etc., favour mass movements.
- Several activating causes precede mass movements. They are: Removal of support from below to materials above through natural or artificial means, Increase in gradient and height of slopes, Overloading through addition of materials naturally or by artificial filling, Overloading due to heavy rainfall, saturation and lubrication of slope materials, Removal of material or load from over the original slope surfaces, Occurrence of earthquakes, explosions or machinery, Excessive natural seepage, Heavy drawdown of water from lakes, reservoirs and rivers leading to slow outflow of water from under the slopes or river banks, Indiscriminate removal of natural vegetation., Mass movements can be grouped under three major classes: Slow movements, Rapid movements, Landslides
- **Slow Movements:** Creep is one type under this category which can occur on moderately steep, soil covered slopes. Movement of materials is extremely slow and imperceptible except through extended observation. Materials involved also included in this group is solifluction which involves slow downslope flowing soil mass or fine grained rock debris saturated or lubricated with water. This process is quite common in moist temperate areas where surface melting of deeply frozen ground and long continued rain respectively,

occur frequently can be soil or rock debris.

- **Rapid Movements:** These movements are mostly prevalent in humid climatic regions and occur over gentle to steep slopes. Movement of water-saturated clayey or silty earth materials down low-angle terraces or hillsides is known as earthflow. Another type in this category is mudflow. In the absence of vegetation cover and with heavy rainfall, thick layers of weathered materials get saturated with water and either slowly or rapidly flow down along definite channels. A third type is the debris avalanche, which is more characteristic of humid regions with or without vegetation cover and occurs in narrow tracks on steep slopes. This debris avalanche can be much faster than the mudflow. Debris avalanche is similar to snow avalanche.

- **Landslides:** These are known as relatively rapid and perceptible movements. Slump is slipping of one or several units of rock debris with a backward rotation with respect to the slope over which the movement takes place. Rapid rolling or sliding of earth debris without backward rotation of mass is known as debris slide. Sliding of individual rock masses down bedding, joint or fault surfaces is rockslide.

## Erosion And Deposition

Erosion involves acquisition and transportation of rock debris. When massive rocks break into smaller fragments through weathering and any other process, erosional geomorphic agents like running water, groundwater, glaciers, wind and waves remove and transport it to other places depending upon the dynamics of each of these agents. It is erosion that is largely responsible for continuous changes that the earth's surface is undergoing. The erosion and transportation of earth materials is brought about by wind, running water, glaciers, waves and groundwater. The erosion can be defined as "application of the kinetic energy associated with the agent to the surface of the land along which it moves".

The work of the other two agents of erosion waves and groundwater is not controlled by climate. Deposition is a consequence of erosion. The erosional agents lose their velocity and hence energy on gentler slopes and the materials carried by them start to settle themselves.

## Soil Formation

A pedologist who studies soils, defines soil as a collection of natural bodies on the earth's surface containing living matter and supporting or capable of supporting plants. Soil is a dynamic medium in which many chemical, physical and biological activities go on constantly. Soil is a result of decay, it is also the medium for growth. It is a changing and developing body. It has many characteristics that fluctuate with the seasons. It may be alternatively cold and warm or dry and moist.

- The soil chemistry, the amount of organic matter, the soil flora and fauna, the temperature and the moisture, all change with the seasons as well as with more extended periods of time.
- Soil formation or pedogenesis depends first on weathering. First, the weathered material or transported deposits are colonised by bacteria and other inferior plant bodies like mosses and lichens. Also, several minor organisms may take shelter within the mantle and deposits. The dead remains of organisms and plants help in humus accumulation.

**Five basic factors control the formation of soils:**

- **Parent material:** Parent material is a passive control factor in soil formation. Parent materials can be any insitu or on-site weathered rock debris (residual soils) or

transported deposits (transported soils). Nature and rate of weathering and depth of weathering mantle are important consideration under parent materials. Also, in case of some limestone areas, where the weathering processes are specific and peculiar, soils will show clear relation with the parent rock.

- **Topography:** Topography like parent materials is another passive control factor. The influence of topography is felt through the amount of exposure of a surface covered by parent materials to sunlight and the amount of surface and sub-surface drainage over and through the parent materials.

- **Climate:** Climate is an important active factor in soil formation. The climatic elements involved in soil development are: (i) moisture in terms of its intensity, frequency and duration of precipitation — evaporation and humidity; (ii) temperature in terms of seasonal and diurnal variations. Precipitation gives soil its moisture content which makes the chemical and biological activities possible. Excess of water helps in the downward transportation of soil components through the soil (eluviation) and deposits the same down below (illuviation). In climates like wet equatorial rainy areas with high rainfall, not only calcium, sodium, magnesium, potassium etc., but also a major part of silica is removed from the soil. Removal of silica from the soil is known as desilication.

- **Biological activity:** The vegetative cover and organisms that occupy the parent materials from the beginning and also at later stages help in adding organic matter, moisture retention, nitrogen, etc. Dead plants provide humus, the finely divided organic matter of the soil. Some organic acids which form during humification aid in decomposing the minerals of the soil parent materials. The influence of large animals like ants, termites, earthworms, rodents, etc., is mechanical, but, it is nevertheless important in soil formation as they rework the soil up and down.

- **Time:** Time is the third important controlling factor in soil formation. The length of time the soil forming processes operate, determines maturation of soils and profile development. A soil becomes mature when all soil-forming processes act for a sufficiently long time developing a profile.

## Chapter 7 Landforms And Their Evolution

### Topic-1 Running Water, Erosional Landforms, Depositional Landforms

After weathering processes have had their actions on the earth materials making up the surface of the earth, the geomorphic agents like running water, groundwater, wind, glaciers, waves perform erosion.

- What is a landform? In simple words, small to medium tracts or parcels of the earth's surface are called landforms. Several related landforms together make up landscapes, (large tracts of earth's surface). Each landform has its own physical shape, size, materials and is a result of the action of certain geomorphic processes and agent(s).

- Actions of most of the geomorphic processes and agents are slow, and hence the results take a long time to take shape. Every landform has a beginning. Landforms once formed may change in their shape, size and nature slowly or fast due to continued action of geomorphic processes and agents. A landmass passes through stages of development somewhat comparable to the stages of

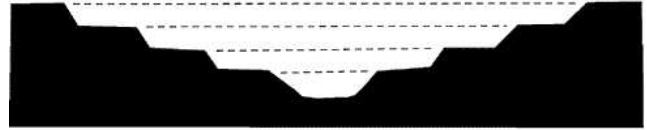


life — youth, mature and old age.

- **Geomorphology** deals with the reconstruction of the history of the surface of the earth through a study of its forms, the materials of which it is made up of and the processes that shape it.
- In humid regions, which receive heavy rainfall running water is considered the most important of the geomorphic agents in bringing about the degradation of the land surface.
- There are two components of running water. One is overland flow on general land surface as a sheet. Another is linear flow as streams and rivers in the valleys. With time, stream channels over steep gradients turn gentler due to continued erosion, and as a consequence, lose their velocity, facilitating active deposition. When the stream beds turn gentler due to continued erosion, downward cutting becomes less dominant and lateral erosion of banks increases and as a consequence the hills and valleys are reduced to plains.
- Overland flow causes sheet erosion. Depending upon irregularities of the land surface, the overland flow may concentrate into narrow to wide paths.
- In the early stages, Streams are few during this stage with poor integration and flow over original slopes showing shallow V-shaped valleys with no floodplains or with very narrow floodplains along trunk streams. Waterfalls and rapids may exist where local hard rock bodies are exposed.
- During the middle stage streams are plenty with good integration. The valleys are still V-shaped but deep; trunk streams are broad enough to have wider floodplains within which streams may flow in meanders confined within the valley. Waterfalls and rapids disappear.
- Smaller tributaries during old age are few with gentle gradients. Streams meander freely over vast floodplains showing natural levees, ox-bow lakes, etc. Most of the landscape is at or slightly above sea level.
- **Erosional Landforms: Valleys:** They start as small and narrow rills; the rills will gradually develop into long and wide gullies; the gullies will further deepen, widen and lengthen to give rise to valleys. Depending upon dimensions and shape, many types of valleys like V-shaped valley, gorge, canyon, etc., can be recognised. A gorge is almost equal in width at its top as well as its bottom. Valley types depend upon the type and structure of rocks in which they form.
- **Potholes and Plunge Pools:** Over the rocky beds of hill-streams more or less circular depressions called potholes form because of stream erosion aided by the abrasion of rock fragments. Once a small and shallow depression forms, pebbles and boulders get collected in those depressions and get rotated by flowing water and consequently the depressions grow in dimensions. A series of such depressions eventually join and the stream valley gets deepened.
- **Incised or Entrenched Meanders:** In streams that flow rapidly over steep gradients, normally erosion is concentrated on the bottom of the stream channel. Also, in the case of steep gradient streams, lateral erosion on the sides of the valleys is not much when compared to the streams flowing on low and gentle slopes. Because of active lateral erosion, streams flowing over gentle slopes, develop sinuous or meandering courses.
- **River terraces:** They are surfaces marking old valley floor or floodplain levels. They may be bedrock surfaces without any alluvial cover or alluvial terraces consisting of stream deposits. River terraces are basically products of erosion as they result due to vertical erosion by the

stream into its own depositional floodplain.

### Paired Terraces

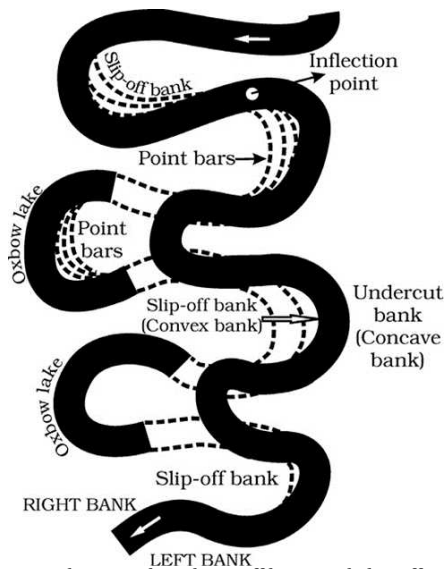


### Unpaired Terraces



*Paired and unpaired river terraces*

- **Depositional Landforms: Alluvial fans:** They are formed when streams flowing from higher levels break into foot slope plains of low gradient. Normally very coarse load is carried by streams flowing over mountain slopes. This load becomes too heavy for the streams to be carried over gentler gradients and gets dumped and spread as a broad low to high cone shaped deposit called alluvial fan.
- **Deltas:** Deltas are like alluvial fans but develop at a different location. The load carried by the rivers is dumped and spread into the sea. If this load is not carried away far into the sea or distributed along the coast, it spreads and accumulates as a low cone. Unlike in alluvial fans, the deposits making up deltas are very well sorted with clear stratification. As the delta grows, the river distributaries continue to increase in length and delta continues to build up into the sea.
- **Floodplains, Natural Levees and Point Bars:** Deposition develops a floodplain just as erosion makes valleys. Floodplain is a major landform of river deposition. The floodplain above the bank is inactive floodplain. Inactive floodplain above the banks basically contain two types of deposits — flood deposits and channel deposits. Natural levees are found along the banks of large rivers. The levee deposits are coarser than the deposits spread by flood waters away from the river. When rivers shift laterally, a series of natural levees can form. Point bars are also known as meander bars.
- **Meanders:** Meander is not a landform but is only a type of channel pattern. This is because of (i) propensity of water flowing over very gentle gradients to work laterally on the banks; (ii) unconsolidated nature of alluvial deposits making up the banks with many irregularities which can be used by water exerting pressure laterally; (iii) coriolis force acting on the fluid water deflecting it like it deflects the wind. When the gradient of the channel becomes extremely low, water flows leisurely and starts working laterally. Slight irregularities along the banks slowly get transformed into a small curvature in the banks; the curvature deepens due to deposition on the inside of the curve and erosion along the bank on the outside. If there is no deposition and no erosion or undercutting, the tendency to meander is reduced. Normally, in meanders of large rivers, there is active deposition along the convex bank and undercutting along the concave bank. The concave bank is known as cut-off bank which shows up as a steep scarp and the convex bank presents a long, gentle profile and is known as slip-off bank (). As meanders grow into deep loops, the same may get cut-off due to erosion at the inflection points and are left as ox-bow lakes.



Meander growth and cut-off loops and slip-off and undercut banks

• **Braided Channels:** When rivers carry coarse material, there can be selective deposition of coarser materials causing formation of a central bar which diverts the flow towards the banks; and this flow increases lateral erosion on the banks. Deposition and lateral erosion of banks are essential for the formation of braided pattern.

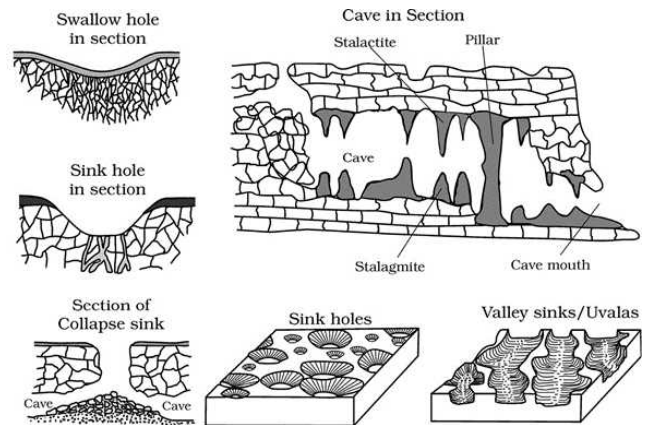
## Topic-2 Groundwater, Erosional Landforms, Depositional Landforms

• The surface water percolates well when the rocks are permeable, thinly bedded and highly jointed and cracked. After vertically going down to some depth, the water under the ground flows horizontally through the bedding planes, joints or through the materials themselves.

• Physical or mechanical removal of materials by moving groundwater is insignificant in developing landforms. That is why, the results of the work of groundwater cannot be seen in all types of rocks.

• Any limestone or dolomitic region showing typical landforms produced by the action of groundwater through the processes of solution and deposition is called Karst topography after the typical topography developed in limestone rocks of Karst region in the Balkans adjacent to Adriatic Sea.

• **Erosional Landforms: Pools, Sinkholes, Lapies and Limestone Pavements:** Small to medium sized round to sub-rounded shallow depressions called swallow holes form on the surface of limestones through solution. Sinkholes are very common in limestone/karst areas. A sinkhole is an opening more or less circular at the top and funnel-shaped towards the bottom with sizes varying in area from a few sq m to a hectare and with depth from a less than half a metre to thirty metres or more. Gradually, most of the surface of the limestone is eaten away by these pits and trenches, leaving it extremely irregular with a maze of points, grooves and ridges or lapies. Especially, these ridges or lapies form due to differential solution activity along parallel to sub-parallel joints. The lapie field may eventually turn into somewhat smooth limestone pavements. **Caves:** In areas where there are alternating beds of rocks (shales, sandstones, quartzites) with limestones or dolomites in between or in areas where limestones are dense, massive and occurring as thick beds, cave formation is prominent. Caves normally have an opening through which cave streams are discharged. Caves having openings at both the ends are called tunnels.



### • Depositional Landforms:

• **Stalactites, Stalagmites and Pillars:** Stalactites hang as icicles of different diameters. Normally they are broad at their bases and taper towards the free ends showing up in a variety of forms. Stalagmites rise up from the floor of the caves. In fact, stalagmites form due to dripping water from the surface or through the thin pipe, of the stalactite, immediately below it. Stalagmites may take the shape of a column, a disc, with either a smooth, rounded bulging end or a miniature crater like depression. The stalagmites and stalactites eventually fuse to give rise to columns and pillars of different diameters.

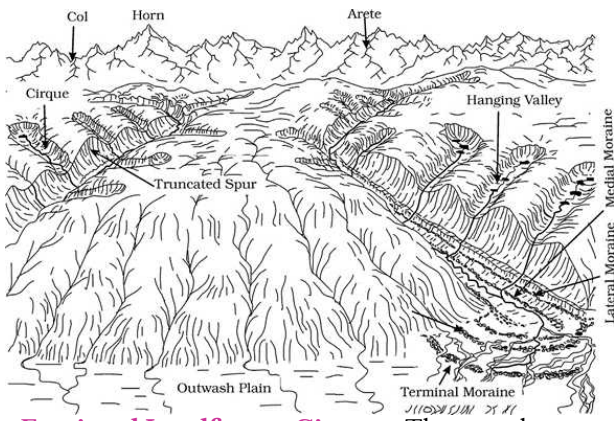
**Important Terms Sinkhole:** A sinkhole is an opening more or less circular at the top and funnel-shaped towards the bottom with sizes varying in area from a few sq m to a hectare and with depth from a less than half a metre to thirty metres or more. **Doline:** It is a shallow usually funnel-shaped depression of the ground surface formed by solution in limestone regions.

**Valley sinks or Uvalas:** A closed karst depression, a terrain form usually of elongated or compound structure and of larger size than a sinkhole. **Ridges or lapies:** It is the grooved, fluted features in an open limestone field. **Stalactites:** A tapering structure hanging like an icicle from the roof of a cave, formed of calcium salts deposited by dripping water. **Stalagmites:** A mound or tapering column rising from the floor of a cave, formed of calcium salts deposited by dripping water and often uniting with a stalactite.

## Topic-3 Glaciers, Erosional Landforms, Depositional Landforms, Waves And Currents, Erosional Landforms, Depositional Landforms

• Masses of ice moving as sheets over the land (continental glacier or piedmont glacier if a vast sheet of ice is spread over the plains at the foot of mountains) or as linear flows down the slopes of mountains in broad trough-like valleys (mountain and valley glaciers) are called glaciers. Glaciers move basically because of the force of gravity.

• Erosion by glaciers is tremendous because of friction caused by sheer weight of the ice. Glaciers can cause significant damage to even un-weathered rocks and can reduce high mountains into low hills and plains.



- **Erosional Landforms: Cirques:** They are the most common of landforms in glaciated mountains. The cirques quite often are found at the heads of glacial valleys. The accumulated ice cuts these cirques while moving down the mountain tops. They are deep, long and wide troughs or basins with very steep concave to vertically dropping high walls at its head as well as sides.
- **Horns and Serrated Ridges:** Horns form through headward erosion of the cirque walls. If three or more radiating glaciers cut headward until their cirques meet, high, sharp pointed and steep-sided peaks called horns form.
- **Glacial Valleys/Troughs:** Glaciated valleys are trough-like and U-shaped with broad floors and relatively smooth, and steep sides. The valleys may contain littered debris or debris shaped as moraines with swampy appearance. Very deep glacial troughs filled with sea water and making up shorelines (in high latitudes) are called fjords/fiords.
- **Depositional Landforms:**
- **Moraines:** They are long ridges of deposits of glacial till. Terminal moraines are long ridges of debris deposited at the end (toe) of the glaciers. Lateral moraines form along the sides parallel to the glacial valleys. Many valley glaciers retreating rapidly leave an irregular sheet of till over their valley floors. Such deposits varying greatly in thickness and in surface topography are called ground moraines.
- **Eskers:** When glaciers melt in summer, the water flows on the surface of the ice or seeps down along the margins or even moves through holes in the ice. These waters accumulate beneath the glacier and flow like streams in a channel beneath the ice.
- **Outwash Plains:** The plains at the foot of the glacial mountains or beyond the limits of continental ice sheets are covered with glacio-fluvial deposits in the form of broad flat alluvial fans which may join to form outwash plains of gravel, silt, sand and clay.
- **Drumlins:** It are smooth oval shaped ridge-like features composed mainly of glacial till with some masses of gravel and sand. The long axes of drumlins are parallel to the direction of ice move.
- One end of the drumlins facing the glacier called the stoss end is blunter and steeper than the other end called tail. Drumlins give an indication of direction of glacier movement.
- Most of the changes along the coasts are accomplished by waves. When waves break, the water is thrown with great force onto the shore, and simultaneously, there is a great churning of sediments on the sea bottom.
- Constant impact of breaking waves drastically affects the coasts. As wave environment changes, the intensity of the force of breaking waves changes.
- Along the high rocky coasts, the rivers appear to have been drowned with highly irregular coastline. The

coastline appears highly indented with extension of water into the land where glacial valleys (fjords) are present.

- Along high rocky coasts, waves break with great force against the land shaping the hill sides into cliffs. Waves gradually minimise the irregularities along the shore.
- When waves break over a gently sloping sedimentary coast, the bottom sediments get churned and move readily building bars, barrier bars, spits and lagoons. The maintenance of these depositional features depends upon the steady supply of materials.

#### • **Erosional Landforms:**

- **Cliffs, Terraces, Caves and Stacks:** Wave-cut cliffs and terraces are two forms usually found where erosion is the dominant shore process. Almost all sea cliffs are steep and may range from a few m to 30 m or even more. The lashing of waves against the base of the cliff and the rock debris that gets smashed against the cliff along with lashing waves create hollows and these hollows get widened and deepened to form sea caves. Retreat of the cliff may leave some remnants of rock standing isolated as small islands just off the shore. Such resistant masses of rock, originally parts of a cliff or hill are called sea stacks.

#### • **Depositional Landforms:**

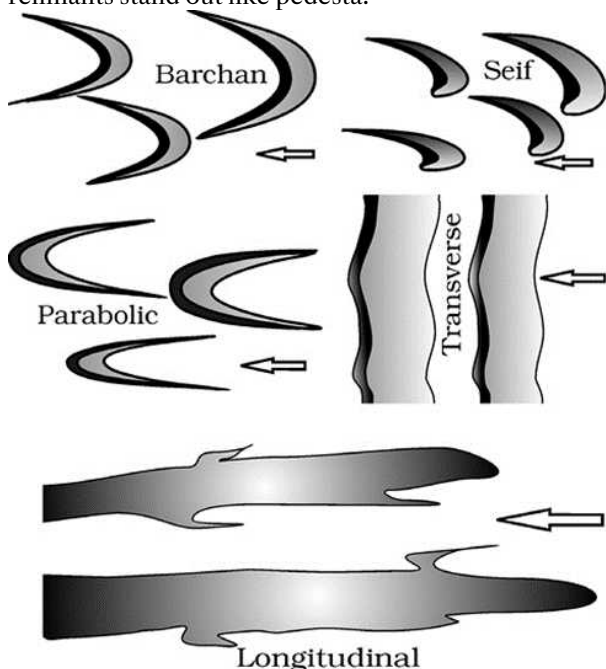
- **Beaches and Dunes:** Beaches are characteristic of shorelines that are dominated by deposition, but may occur as patches along even the rugged shores. Most of the sediment making up the beaches comes from land carried by the streams and rivers or from wave erosion. Most of the beaches are made up of sand sized materials. Beaches called shingle beaches contain excessively small pebbles and even cobbles.
- **Bars, Barriers and Spits:** A ridge of sand and shingle formed in the sea in the off-shore zone (from the position of low tide waterline to seaward) lying approximately parallel to the coast is called an off-shore bar. An off-shore bar which is exposed due to further addition of sand is termed a barrier bar. Sometimes such barrier bars get keyed up to one end of the bay when they are called spits.

### Topic-4 Winds, Erosional Landforms, Depositional Landforms

- Wind is one of the two dominant agents in hot deserts. The desert floors get heated up too much and too quickly because of being dry and barren.
- Winds also move along the desert floors with great speed and the obstructions in their path create turbulence.
- Winds cause deflation, abrasion and impact. Deflation includes lifting and removal of dust and smaller particles from the surface of rocks. In the transportation process sand and silt act as effective tools to abrade the land surface.
- The wind action creates a number of interesting erosional and depositional features in the deserts. The wind moves fine materials and general mass erosion is accomplished mainly through sheet floods or sheet wash.
- **Erosional Landforms: Pediments and Pediplains:** Landscape evolution in deserts is primarily concerned with the formation and extension of pediments. Gently inclined rocky floors close to the mountains at their foot with or without a thin cover of debris, are called pediments. Erosion starts along the steep margins of the landmass or the steep sides of the tectonically controlled steep incision features over the landmass.



- **Playas:** Plains are by far the most prominent landforms in the deserts. In times of sufficient water, these plains are covered up by a shallow water body. Such types of shallow lakes are called as playas where water is retained only for short duration due to evaporation and quite often the playas contain good deposition of salts.
- **Deflation Hollows and Caves:** Weathered mantle from over the rocks or bare soil, gets blown out by persistent movement of wind currents in one direction. This process may create shallow depressions called deflation hollows. Deflation also creates numerous small pits or cavities over rock surfaces. The rock faces suffer impact and abrasion of wind-borne sand and first shallow depressures called blow outs are created, and some of the blow outs become deeper and wider fit to be called caves.
- **Mushroom, Table and Pedestal Rocks:** Many rock-outcrops in the deserts easily susceptible to wind deflation and abrasion are worn out quickly leaving some remnants of resistant rocks polished beautifully in the shape of mushroom with a slender stalk and a broad and rounded pear shaped cap above. Sometimes, the top surface is broad like a table top and quite often, the remnants stand out like pedestals.



- **Depositional Landforms: Sand Dunes:** Dry hot deserts are good places for sand dune formation. Obstacles to initiate dune formation are equally important. There can be a great variety of dune forms.
- **Barchans:** Crescent shaped dunes called barchans with the points or wings directed away from wind direction *i.e.*, downwind, form where the wind direction is constant and moderate and where the original surface over which sand is moving is almost uniform. Parabolic dunes form when sandy surfaces are partially covered with vegetation. Seif is similar to barchan with a small difference. Seif has only one wing or point. This happens when there is shift in wind conditions. The lone wings of seifs can grow very long and high. When sand is plenty, quite often, the regular shaped dunes coalesce and lose their individual characteristics. Most of the dunes in the deserts shift and a few of them will get stabilised especially near human habitations.

## Atmosphere

Air is essential to the survival of all organisms. Some organisms like humans may survive for some time without food and water but can't survive even a few minutes without breathing air. Atmosphere is a mixture of different gases and it envelopes the earth all round. It contains life-giving gases like oxygen for humans and animals and carbon dioxide for plants.

- The air is an integral part of the earth's mass and 99 per cent of the total mass of the atmosphere is confined to the height of 32 km from the earth's surface.
- The atmosphere is composed of gases, water vapour and dust particles. The proportion of gases changes in the higher layers of the atmosphere in such a way that oxygen will be almost in negligible quantity at the height of 120 km.
- Carbon dioxide is meteorologically a very important gas as it is transparent to the incoming solar radiation but opaque to the outgoing terrestrial radiation. It absorbs a part of terrestrial radiation and reflects back some part of it towards the earth's surface. It is largely responsible for the green house effect.
- Ozone is another important component of the atmosphere found between 10 and 50 km above the earth's surface and acts as a filter and absorbs the ultraviolet rays radiating from the sun and prevents them from reaching the surface of the earth.
- Water vapour is also a variable gas in the atmosphere, which decreases with altitude. It acts like a blanket allowing the earth neither to become too cold nor too hot. Water vapour also contributes to the stability and instability in the air.
- Atmosphere has a sufficient capacity to keep small solid particles, which may originate from different sources and include sea salts, fine soil, smoke-soot, ash, pollen, dust and disintegrated particles of meteors.
- Dust particles are generally concentrated in the lower layers of the atmosphere; yet, convectional air currents may transport them to great heights. Dust and salt particles act as hygroscopic nuclei around which water vapour condenses to produce clouds.

**Table 8.1: Permanent Gases of the Atmosphere**

ConsUUuni	Formula	Percentage by Volume
Nitrogen	Nr	78.08
Oxygen	Or	20.95
Argon	Ar	0.93
Carbon dloxkle	CO <sub>2</sub>	0.036
Neon	Ne	0.002
llebum	He	0.0005
Krypto	Kr	0.00 Ī
Xenon	Xe	0.00009
Hydrogen	H <sub>2</sub>	0.00005

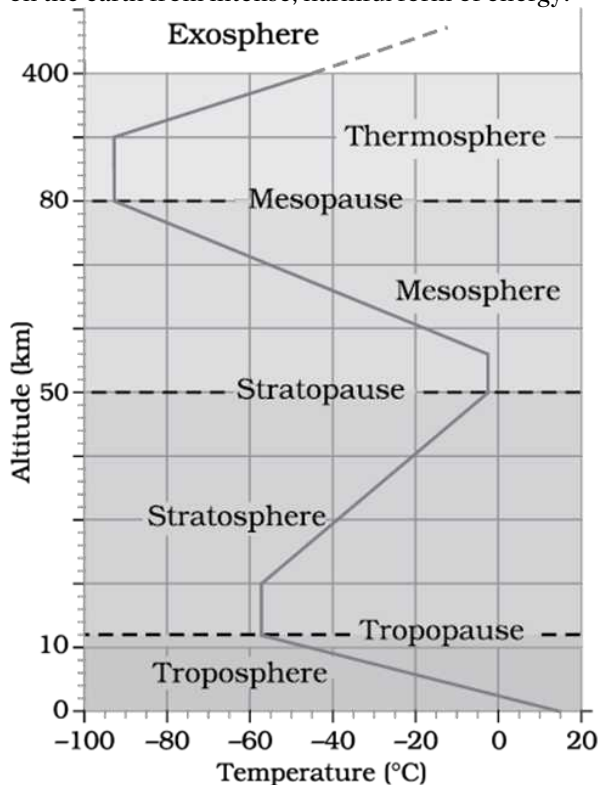
### Structure Of The Atmosphere

The atmosphere consists of different layers with varying density and temperature. Density is highest near the surface of the earth and decreases with increasing altitude.

- Atmosphere is divided into five different layers depending upon the temperature condition. They are: troposphere, stratosphere, mesosphere, ionosphere and exosphere.
- **The troposphere** is the lowermost layer of the atmosphere. Its average height is 13 km and extends roughly to a height of 8 km near the poles and about 18 km at the equator. Thickness of the troposphere is greatest at the equator because heat is transported to great heights by strong convectional currents. All

changes in climate and weather take place in this layer. The temperature in this layer decreases at the rate of  $1^{\circ}\text{C}$  for every 165 m of height. This is the most important layer for all biological activity.

- The zone separating the troposphere from stratosphere is known as the tropopause. The air temperature at the tropopause is about minus  $80^{\circ}\text{C}$  over the equator and about minus  $45^{\circ}\text{C}$  over the poles.
- The stratosphere is found above the tropopause and extends up to a height of 50 km. One important feature of the stratosphere is that it contains the ozone layer. This layer absorbs ultraviolet radiation and shields life on the earth from intense, harmful form of energy.



- The mesosphere lies above the stratosphere, which extends up to a height of 80 km. In this layer, once again, temperature starts decreasing with the increase in altitude and reaches up to minus  $100^{\circ}\text{C}$  at the height of 80 km. The upper limit of mesosphere is known as the mesopause.
- The ionosphere is located between 80 and 400 km above the mesopause. It contains electrically charged particles known as ions, and hence, it is known as ionosphere.
- The uppermost layer of the atmosphere above the ionosphere is known as the exosphere. This is the highest layer but very little is known about it. Whatever contents are there, these are extremely rarefied in this layer, and it gradually merges with the outer space.

## Chapter 9 Solar Radiation, Heat Balance And Temperature

### Topic-1 Solar Radiation, Variability Of Insolation At The Surface Of The Earth, Heating And Cooling Of Atmosphere, Terrestrial Radiation

- The earth receives almost all of its energy from the sun. The earth in turn radiates back to space the energy received from the sun. As a result, the earth neither warms up nor does it get cooled over a period of

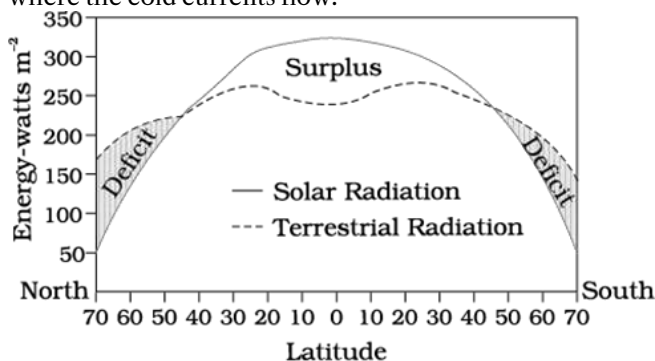
time. Thus, the amount of heat received by different parts of the earth is not the same. This variation causes pressure differences in the atmosphere. This leads to transfer of heat from one region to the other by winds.

- The earth's surface receives most of its energy in short wavelengths. The energy received by the earth is known as incoming solar radiation which in short is termed as insolation. As the earth is a geoid resembling a sphere, the sun's rays fall obliquely at the top of the atmosphere and the earth intercepts a very small portion of the sun's energy.
- The solar output received at the top of the atmosphere varies slightly in a year due to the variations in the distance between the earth and the sun.
- During its revolution around the sun, the earth is farthest from the sun (152 million km on 4<sup>th</sup> July). This position of the earth is called aphelion. On 3<sup>rd</sup> January, the earth is the nearest to the sun (147 million km). This position is called perihelion.
- The variation in the solar output does not have great effect on daily weather changes on the surface of the earth. The amount and the intensity of insolation vary during a day, in a season and in a year. The factors that cause these variations in insolation are: the rotation of earth on its axis; the angle of inclination of the sun's rays; the length of the day; the transparency of the atmosphere; the configuration of land in terms of its aspect. The last two however, have less influence.
- The atmosphere is largely transparent to short wave solar radiation. The incoming solar radiation passes through the atmosphere before striking the earth's surface. The insolation received at the surface varies from about  $320 \text{ Watt/m}^2$  in the tropics to about  $70 \text{ Watt/m}^2$  in the poles. Maximum insolation is received over the subtropical deserts, where the cloudiness is the least.
- Equator receives comparatively less insolation than the tropics.
- The Earth after being heated by insolation transmits the heat to the atmospheric layers near to the earth in long wave form. The air in contact with the land gets heated slowly and the upper layers in contact with the lower layers also get heated. This process is called conduction. Conduction takes place when two bodies of unequal temperature are in contact with one another, there is a flow of energy from the warmer to cooler body.
- The air in contact with the earth rises vertically on heating in the form of currents and further transmits the heat of the atmosphere. This process of vertical heating of the atmosphere is known as convection.
- The transfer of heat through horizontal movement of air is called advection.
- In tropical regions particularly in northern India during summer season local winds called 'loo' is the outcome of advection process.
- The insolation received by the earth is in short waves forms and heats up its surface. The earth after being heated itself becomes a radiating body and it radiates energy to the atmosphere in long wave form. This energy heats up the atmosphere from below. This process is known as terrestrial radiation. The long wave radiation is absorbed by the atmospheric gases particularly by carbon dioxide and the other green house gases. Thus, the atmosphere is indirectly heated by the earth's radiation.

### Topic-2 Heat Budget Of The Planet Earth, Temperature, Factors Controlling

## Temperature Distribution, Inversion Of Temperature

- The earth as a whole does not accumulate or lose heat. It maintains its temperature. This can happen only if the amount of heat received in the form of insolation equals the amount lost by the earth through **terrestrial radiation**.
- Consider that the insolation received at the top of the atmosphere is 100 per cent. While passing through the atmosphere some amount of energy is reflected, scattered and absorbed. Only the remaining part reaches the earth's surface.
- Roughly 35 units are reflected back to space even before reaching the earth's surface. Of these, 27 units are reflected back from the top of the clouds and 2 units from the snow and ice-covered areas of the earth. The reflected amount of radiation is called the albedo of the earth.
- Some part of the earth has surplus radiation balance while the other part has deficit.
- The surplus heat energy from the tropics is redistributed pole wards and as a result the tropics do not get progressively heated up due to the accumulation of excess heat or the high latitudes get permanently frozen due to excess deficit.
- The interaction of insolation with the atmosphere and the earth's surface creates heat which is measured in terms of temperature.
- While heat represents the molecular movement of particles comprising a substance, the temperature is the measurement in degrees of how hot (or cold) a thing (or a place) is.
- The various factors controlling temperature distribution are:
  - **The Latitude:** The temperature of a place depends on the insolation received. It has been explained earlier that the insolation varies according to the latitude hence the temperature also varies accordingly.
  - **The Altitude:** The temperature generally decreases with increasing height. The rate of decrease of temperature with height is termed as the normal lapse rate. It is 6.5°C per 1,000 m.
  - **Distance for the Sea:** As compared to land, the sea gets heated slowly and loses heat slowly. Land heats up and cools down quickly. Therefore, the variation in temperature over the sea is less compared to land.
  - **Air mass and Ocean Currents:** The places, which come under the influence of warm air masses experience higher temperature and the places that come under the influence of cold air masses experience low temperature. Similarly, the places located on the coast where the warm ocean currents flow record higher temperature than the places located on the coast where the cold currents flow.



### Latitudinal variation in net radiation balance

- **Distribution of Temperature:** The temperature

distribution is generally shown on the map with the help of isotherms. The isotherms are lines joining places having equal temperature. The global distribution of temperature can well be understood by studying the temperature distribution in January and July.

- The temperature decreases with increase in elevation. It is called normal lapse rate. At times, the situations are reversed and the normal lapse rate is inverted. It is called inversion of temperature. Inversion is usually of short duration but quite common nonetheless.
- A long winter night with clear skies and still air is ideal situation for inversion. Over polar areas, temperature inversion is normal throughout the year.
- The inversion takes place in hills and mountains due to air drainage. Cold air at hills and mountains, produced during night, flow under the influence of gravity. Being heavy and dense, the cold air acts almost like water and moves down the slopes to pile up deeply in pockets and valley bottoms with warm air above. This is called drainage. It protects plants from frost damages.

**Important Terms** **Insolation:** The energy received by the earth is known as incoming solar radiation which in short is termed as insolation. **Albedo of the earth:** While passing through the atmosphere some amount of energy is reflected, scattered and absorbed. Only the remaining part reached the earth surface. The reflected amount of radiation is called the albedo of the earth. **Normal lapse time:** The temperature generally decreases with increasing height. The rate of decrease of temperature with height is termed as the normal lapse time. **Loo:** It is the strong, gusty, hot and dry summer wind which blows in the summer season. **Inversion of temperature:** A reversal in the normal behaviour of temperature in the troposphere in which a layer of cool air at the surface is overlain by a layer of warmer air. **Planck's Law:** This law states that hotter a body, the more energy it radiates and shorter the wavelength of that radiation. **Air drainage:** The downslope flow of relatively cold air. **Specific heat:** It is the energy needed to raise the temperature of one gram of substance by one Celsius.

## Chapter 10 Atmospheric Circulation And Weather Systems

### Topic-1 Atmospheric Pressure, Vertical Variation Of Pressure, Horizontal Distribution Of Pressure, World Distribution Of Sea Level Pressure, Forces Affecting The Velocity And Direction Of Wind.

- Air expands when heated and gets compressed when cooled. This results in variations in the atmospheric pressure. The result is that it causes the movement of air from high pressure to low pressure, setting the air in motion. Atmospheric pressure also determines when the air will rise or sink. The wind redistributes the heat and moisture across the planet, thereby, maintaining a constant temperature for the planet as a whole. The vertical rising of moist air cools it down to form the clouds and bring precipitation. The weight of a column of air contained in a unit area from the mean sea level to the top of the atmosphere is called the atmospheric pressure. The atmospheric pressure is expressed in units of milibar (mb). Air pressure is measured with the help of a mercury barometer or the aneroid barometer.
- The pressure decreases with height. At any elevation it varies from place to place and its variation is the primary cause of air motion, i.e. wind which moves from high pressure areas to low pressure areas. The vertical



pressure gradient force is much larger than that of the horizontal pressure gradient.

- Horizontal distribution of pressure is studied by drawing isobars at constant levels. Isobars are lines connecting places having equal pressure. Near the equator the sea level pressure is low and the area is known as **equatorial low**. Along  $30^\circ \text{N}$  and  $30^\circ \text{S}$  are found the high-pressure areas known as the subtropical highs. Further pole wards along  $60^\circ \text{N}$  and  $60^\circ \text{S}$ , the low-pressure belts are termed as the sub polar lows. Near the poles the pressure is high and it is known as the polar high. These pressure belts are not permanent in nature. They oscillate with the apparent movement of the Sun. In the Northern Hemisphere in winter they move southwards and in the summer northwards.

- The air in motion is called wind. The wind blows from high pressure to low pressure. The wind at the surface experiences friction. In addition, rotation of the earth also affects the wind movement. The force exerted by the rotation of the earth is known as the Coriolis Force. Thus, the horizontal winds near the Earth surface respond to the combined effect of three forces – the pressure gradient force, the frictional force and the Coriolis Force.

- **Pressure Gradient Force:** The differences in atmospheric pressure produces a force. The rate of change of pressure with respect to distance is the pressure gradient.

- **Frictional Force:** It affects the speed of the wind. It is greatest at the surface and its influence generally extends upto an elevation of 1 - 3 km. Over the sea surface the friction is minimal.

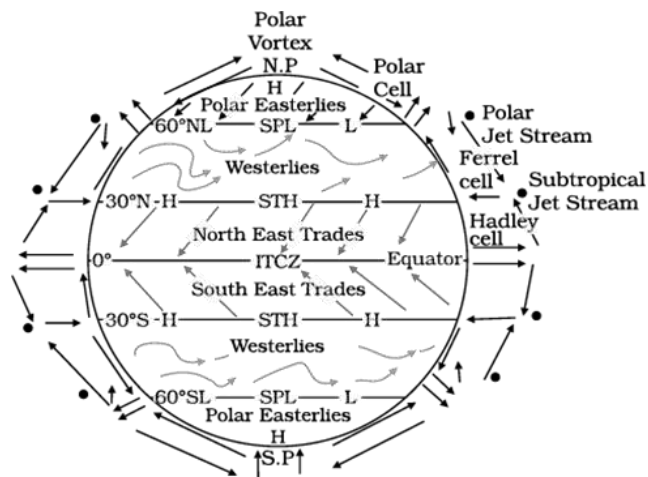
- **Coriolis Force:** The rotation of the earth about its axis affects the direction of the wind. This force is called the Coriolis Force. The Coriolis Force is directly proportional to the angle of latitude. It is maximum at the poles and is absent at the Equator.

- **Pressure and Wind:** The velocity and direction of the wind are the net result of the wind generating forces. The winds in the upper atmosphere, 2 - 3 km above the surface, are free from frictional effect of the surface and are controlled by the pressure gradient and the Coriolis Force. Coriolis Force and the resultant wind blows parallel to the isobar. This wind is known as the geostrophic wind.

- The wind circulation around a low is called cyclonic circulation. Around a high it is called anti cyclonic circulation. The direction of winds around such systems changes according to their location in different hemispheres.

## Topic-2 General Circulation Of The Atmosphere Quick Review

**The pattern of planetary winds largely depends on:** (i) latitudinal variation of atmospheric heating; (ii) emergence of pressure belts; (iii) the migration of belts following apparent path of the sun; (iv) the distribution of continents and oceans; (v) the rotation of earth.



- The pattern of the movement of the planetary winds is called the **general circulation of the atmosphere**. The general circulation of the atmosphere also sets in motion the ocean water circulation which influences the Earth's climate. The air at the **Inter Tropical Convergence Zone (ITCZ)** rises because of convection caused by high insolation and a low pressure is created.

- The winds from the tropics converge at this low pressure zone. The converged air rises along with the convective cell. It reaches the top of the troposphere up to an altitude of 14 km. and moves towards the poles.

- This causes accumulation of air at about  $30^\circ \text{N}$  and  $30^\circ \text{S}$ . Part of the accumulated air sinks to the ground and forms a subtropical high. Another reason for sinking is the cooling of air when it reaches  $30^\circ \text{N}$  and  $30^\circ \text{S}$  latitudes. Down below near the land surface the air flows towards the Equator as the easterlies. The easterlies from either side of the Equator converge in the Inter Tropical Convergence Zone (ITCZ).

- Such circulations from the surface upwards and vice-versa are called cells. Such a cell in the tropics is called **Hadley Cell**.

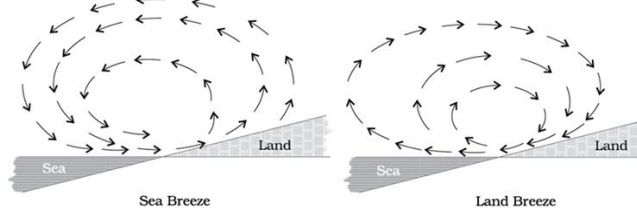
- In the middle latitudes the circulation is that of sinking cold air that comes from the poles and the rising warm air that blows from the subtropical high. At the surface these winds are called westerlies and the cell is known as the **Ferrel Cell**.

- At polar latitudes the cold dense air subsides near the poles and blows towards middle latitudes as the polar easterlies. This cell is called the polar cell. These three cells set the pattern for the general circulation of the atmosphere.

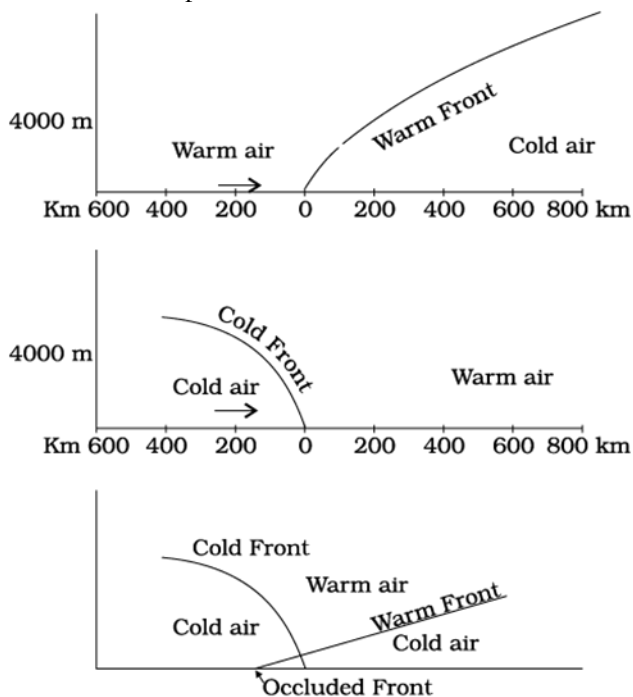
### General Atmospheric Circulation and its Effects on Oceans

Warming and cooling of the Pacific Ocean is most important in terms of general atmospheric circulation. The warm water of the central Pacific Ocean slowly drifts towards South American coast and replaces the cool Peruvian current. Such appearance of warm water off the coast of Peru is known as the El Nino. The El Nino event is closely associated with the pressure changes in the Central Pacific and Australia. This change in pressure condition over Pacific is known as the southern oscillation. The combined phenomenon of southern oscillation and El Nino is known as ENSO. In the years when the ENSO is strong, large-scale variations in weather occur over the world. The arid west coast of South America receives heavy rainfall, drought occurs in Australia and sometimes in India and floods in China. This phenomenon is closely monitored and is used for long range forecasting in major parts of the world.

- The local deviations from the general circulation system are as follows.
- **Seasonal Wind:** The pattern of wind circulation is modified in different seasons due to the shifting of regions of maximum heating, pressure and wind belts. The most pronounced effect of such a shift is noticed in the monsoons, especially over southeast Asia.
- **Local Winds:** Differences in the heating and cooling of Earth surfaces and the cycles those develop daily or annually can create several common, local or regional winds.
- **Land and Sea breeze:** The land and sea absorb and transfer heat differently. During the day the land heats up faster and becomes warmer than the sea. Therefore, over the land the air rises giving rise to a low pressure area, whereas the sea is relatively cool and the pressure over sea is relatively high. In the night the reversal of condition takes place. The land loses heat faster and is cooler than the sea. The pressure gradient is from the land to the sea and hence land breeze results.



- **Mountain and Valley Winds:** In mountainous regions, during the day the slopes get heated up and air moves upslope and to fill the resulting gap the air from the valley blows up the valley. This wind is known as the valley breeze. The cool air, of the high plateaus and ice fields draining into the valley is called katabatic wind.
- **Air Masses:** The air with distinctive characteristics in terms of temperature and humidity is called an airmass. It is defined as a large body of air having little horizontal variation in temperature and moisture.



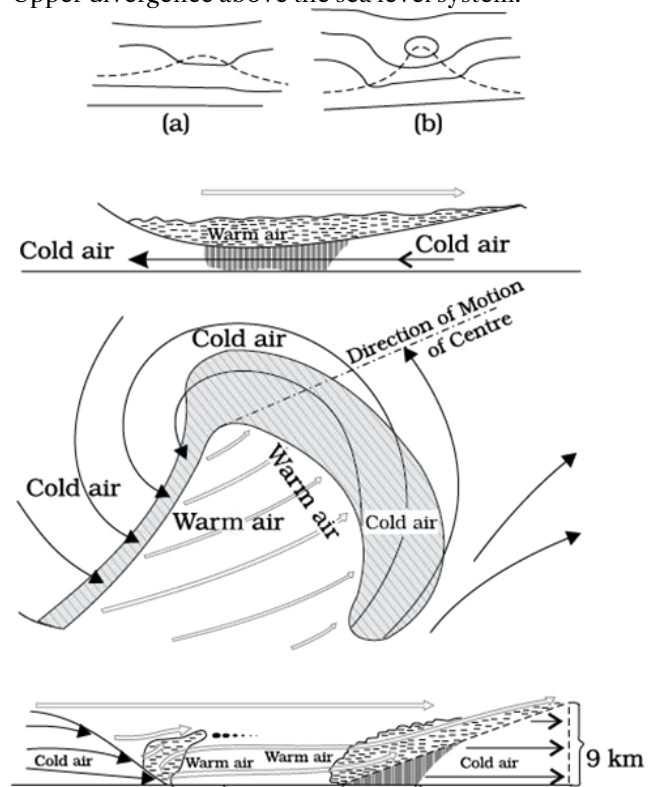
- **Fronts:** When two different air masses meet, the boundary zone between them is called a front. The process of formation of the fronts is known as frontogenesis. When the front remains stationary, it is called a stationary front. When the cold air moves towards the warm air mass, its contact zone is called the cold front, whereas if the warm air mass moves towards the cold air mass, the contact zone is a warm front. If an

air mass is fully lifted above the land surface, it is called the occluded front.

- **Extra Tropical Cyclones:** The systems developing in the mid and high latitude, beyond the tropics are called the middle latitude or extra tropical cyclones. The passage of front causes abrupt changes in the weather conditions over the area in the middle and high latitudes. Extra tropical cyclones form along the polar front. Initially, the front is stationary. In the Northern Hemisphere, warm air blows from the South and cold air from the North of the front. The extra tropical cyclone differs from the tropical cyclone in number of ways. The extra tropical cyclones have a clear frontal system which is not present in the tropical cyclones. They cover a larger area and can originate over the land and sea. Whereas the tropical cyclones originate only over the seas and on reaching the land they dissipate. The extra tropical cyclone affects a much larger area as compared to the tropical cyclone. The wind velocity in a tropical cyclone is much higher and it is more destructive. The extra tropical cyclones move from west to east but tropical cyclones, move from East to West.

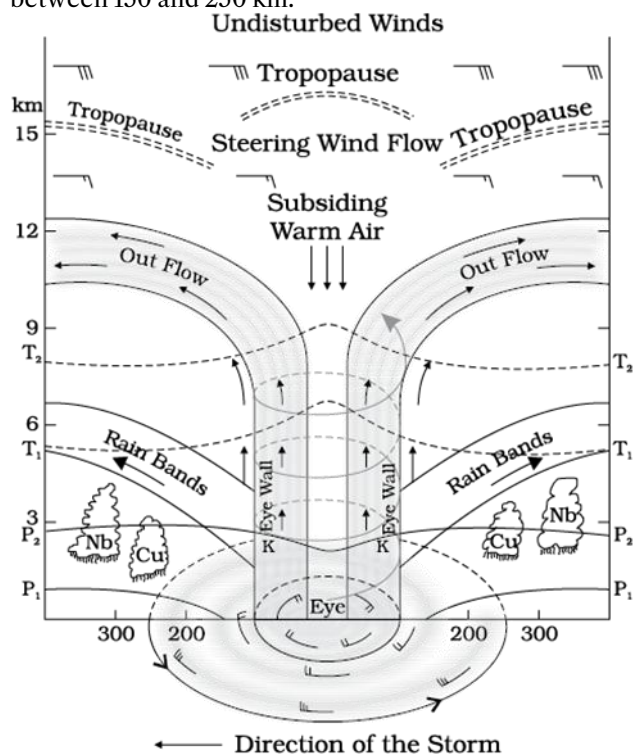
- **Tropical Cyclones:** Tropical cyclones are violent storms that originate over oceans in tropical areas and move over to the coastal areas bringing about large scale destruction caused by violent winds, very heavy rainfall and storm surges. This is one of the most devastating natural calamities. Tropical cyclones originate and intensify over warm tropical oceans.

- The conditions favourable for the formation and intensification of tropical storms are: (i) Large sea surface with temperature higher than  $27^{\circ}\text{C}$ ; (ii) Presence of the Coriolis force; (iii) Small variations in the vertical wind speed; (iv) A pre-existing weak low-pressure area or low-level-cyclonic circulation; (v) Upper divergence above the sea level system.



- The place where a tropical cyclone crosses the coast is called the landfall of the cyclone. The cyclones, which cross  $20^{\circ}\text{N}$  latitude generally, recurve and they are more destructive.
- A mature tropical cyclone is characterised by the

strong spirally circulating wind around the centre, called the eye. The diameter of the circulating system can vary between 150 and 250 km.



- **Thunderstorms and Tornadoes:** Other severe local storms are thunderstorms and tornadoes. They are of short duration, occurring over a small area but are violent. Thunderstorms are caused by intense convection on moist hot days. A thunderstorm is a well-grown cumulonimbus cloud producing thunder and lightning.
- A thunderstorm is characterised by intense updraft of rising warm air, which causes the clouds to grow bigger and rise to greater height. This causes precipitation. Later, downdraft brings down to earth the cool air and the rain. From severe thunderstorms sometimes spiralling wind descends like a trunk of an elephant with great force, with very low pressure at the centre, causing massive destruction on its way. Such a phenomenon is called a tornado. Tornadoes generally occur in middle latitudes. The tornado over the sea is called water sprouts.

## Chapter 11 Water In The Atmosphere

### Topic-1 Evaporation And Condensation, Clouds

The air contains water vapour. It varies from zero to four per cent by volume of the atmosphere and plays an important role in the weather phenomena.

- Water is present in the atmosphere in three forms namely – gaseous, liquid and solid. Water vapour present in the air is known as humidity. It is expressed quantitatively in different ways. The actual amount of the water vapour present in the atmosphere is known as the absolute humidity. The absolute humidity differs from place to place on the surface of the earth. The percentage of moisture present in the atmosphere as compared to its full capacity at a given temperature is known as the relative humidity. It is the weight of water vapour per unit volume of air and is expressed in terms of grams per cubic metre.
- The air containing moisture to its full capacity at a

given temperature is said to be saturated. The temperature at which saturation occurs in a given sample of air is known as dew point.

- Evaporation is a process by which water is transformed from liquid to gaseous state. Heat is the main cause for evaporation. The temperature at which the water starts evaporating is referred to as the latent heat of vapourisation.
- The transformation of water vapour into water is called condensation. Condensation is caused by the loss of heat. When moist air is cooled, it may reach a level when its capacity to hold water vapour ceases. Then, the excess water vapour condenses into liquid form. If it directly condenses into solid form, it is known as sublimation. Condensation also takes place when the moist air comes in contact with some colder object and it may also take place when the temperature is close to the dew point. Condensation, therefore, depends upon the amount of cooling and the relative humidity of the air.
- Condensation is influenced by the volume of air, temperature, pressure and humidity.
- Condensation takes place: When the temperature of the air is reduced to dew point with its volume remaining constant; When both the volume and the temperature are reduced; When moisture is added to the air through evaporation. However, the most favourable condition for condensation is the decrease in air temperature.
- Condensation takes place when the dew point is lower than the freezing point as well as higher than the freezing point. After condensation the water vapour or the moisture in the atmosphere takes one of the following forms such as dew, frost, fog and clouds.
- When the moisture is deposited in the form of water droplets on cooler surfaces of solid objects (rather than nuclei in air above the surface) such as stones, grass blades and plant leaves, it is known as dew.
- Frost forms on cold surfaces when condensation takes place below freezing point ( $0^{\circ}\text{C}$ ), i.e. the dew point is at or below the freezing point.
- The ideal conditions for the formation of white frost are the same as those for the formation of dew, except that the air temperature must be at or below the freezing point.
- When the temperature of an air mass containing a large quantity of water vapour falls all of a sudden, condensation takes place within itself on fine dust particles. So, the fog is a cloud with its base at or very near to the ground. Because of the fog and mist, the visibility becomes poor to zero.
- In urban and industrial centres smoke provides plenty of nuclei which help the formation of fog and mist. Such a condition when fog is mixed with smoke, is described as smog.
- In mist each nuclei contains a thicker layer of moisture. Mists are frequent over mountains as the rising warm air up the slopes meets a cold surface.
- Cloud is a mass of minute water droplets or tiny crystals of ice formed by the condensation of the water vapour in free air at considerable elevations.
- According to their height, expanse, density and transparency or opaqueness clouds are grouped under four types:
  - **Cirrus:** Cirrus clouds are formed at high altitudes (8,000 - 12,000m). They are thin and detached clouds having a feathery appearance. They are always white in colour.
  - **Cumulus:** Cumulus clouds look like cotton wool.



They are generally formed at a height of 4,000-7,000 m. They exist in patches and can be seen scattered here and there. They have a flat base.

- **Stratus:** As their name implies, these are layered clouds covering large portions of the sky. These clouds are generally formed either due to loss of heat or the mixing of air masses with different temperatures.

- **Nimbus:** Nimbus clouds are black or dark grey. They form at middle levels or very near to the surface of the earth. These are extremely dense and opaque to the rays of the sun. Sometimes, the clouds are so low that they seem to touch the ground. Nimbus clouds are shapeless masses of thick vapour.

## Topic-2 Precipitation, Types Of Rainfall, World Distribution Of Rainfall

- The process of continuous condensation in free air helps the condensed particles to grow in size. When the resistance of the air fails to hold them against the force of gravity, they fall on to the earth's surface. So after the condensation of water vapour, the release of moisture is known as precipitation.

- The precipitation in the form of water is called rainfall, when the temperature is lower than the 0°C, precipitation takes place in the form of fine flakes of snow and is called snowfall.

- Besides rain and snow, other forms of precipitation are sleet and hail.

- Sleet is frozen raindrops and refrozen melted snow-water. When a layer of air with the temperature above freezing point overlies a subfreezing layer near the ground, precipitation takes place in the form of sleet.
- Sometimes, drops of rain after being released by the clouds become solidified into small rounded solid pieces of ice and which reach the surface of the earth are called hailstones.

- On the basis of origin, rainfall may be classified into three main types – the convectional, orographic or relief and the cyclonic or frontal.

- **Conventional Rain:** The air on being heated, becomes light and rises up in convection currents. As it rises, it expands and loses heat and consequently, condensation takes place and cumulous clouds are formed. With thunder and lightening, heavy rainfall takes place but this does not last. It is very common in the equatorial regions and interior parts of the continents, particularly in the northern hemisphere.

- **Orographic Rain:** When the saturated air mass comes across a mountain, it is forced to ascend and as it rises, it expands; the temperature falls, and the moisture is condensed. The chief characteristic of this sort of rain is that the windward slopes receive greater rainfall. The area situated on the leeward side, which gets less rainfall is known as the rain-shadow area. It is also known as the relief rain.

- **Cyclonic Rain:** The rain caused by cyclonic activity is called cyclonic rain. It occurs along the fronts of the cyclone. It is formed when two masses of air of different temperature, humidity and density meet.

- Different places on the earth's surface receive different amounts of rainfall in a year and that too in different seasons.

- The coastal areas of the world receive greater amounts of rainfall than the interior of the continents. The rainfall is more over the oceans than on the landmasses of the world because of being great sources of water. Between the latitudes 35° and 40° N and S of the Equator, the rain is heavier on the eastern coasts and goes on decreasing towards the west. But, between 45°

and 65° N and S of Equator, due to the westerlies, the rainfall is first received on the western margins of the continents and it goes on decreasing towards the east.

- Wherever mountains run parallel to the coast, the rain is greater on the coastal plain, on the windward side and it decreases towards the leeward side.

- The equatorial belt, the windward slopes of the mountains along the western coasts in the cool temperate zone and the coastal areas of the monsoon land receive heavy rainfall of over 200 cm per annum.

- Interior continental areas receive moderate rainfall varying from 100 - 200 cm per annum. The coastal areas of the continents receive moderate amount of rainfall. The central parts of the tropical land and the eastern and interior parts of the temperate lands receive rainfall varying between 50-100 cm per annum.

- Areas lying in the rain shadow zone of the interior of the continents and high latitudes receive very low rainfall less than 50 cm per annum. Seasonal distribution of rainfall provides an important aspect to judge its effectiveness.

- In some regions rainfall is distributed evenly throughout the year such as in the equatorial belt and in the western parts of cool temperate regions.

## Chapter 12 World Climate And Climate Change

### Topic-1 Koeppen's Scheme Of Classification Of Climate, Tropical Humid Climates, Dry Climates, Cold Snow Forest Climates, Polar Climates, Highland Climates.

- The most widely used classification of climate is the empirical climate classification scheme developed by V. Koeppen. Koeppen identified a close relationship between the distribution of vegetation and climate. He selected certain values of temperature and precipitation and related them to the distribution of vegetation and used these values for classifying the climates. He introduced the use of capital and small letters to designate climatic groups and types. Although developed in 1918 and modified over a period of time, Koeppen's scheme is still popular and in use.

- Koeppen recognised five major climatic groups, four of them are based on temperature and one on precipitation. The climatic groups are subdivided into types, designated by small letters, based on seasonality of precipitation and temperature characteristics. The seasons of dryness are indicated by the small letters namely - f, m, w and s, where f corresponds to no dry season, m - monsoon climate, w - winter dry season and s - summer dry season. The small letters a, b, c and d refer to the degree of severity of temperature.

- The English capital letters such as A, B, C, D and E present the Koeppen climate groups in which A, C, D and E delineate humid climates and B dry climates. Later he added new climate zone called H types.

Group	Characteristics
A - Tropical	Average temperature of the coldest month is 18° C or higher
B - Dry Climates	Potential evaporation exceeds precipitation
C - Warm Temperate	The average temperature of the coldest month of the (Mid-latitude) climates years is higher than minus 3°C but below 18°C
D - Cold Snow	The average temperature of the coldest

Forest Climates	month Is minus 3° C or below
E - Cold Climates	Average temperature for all months is below 10° C
H - High Land	Cold due to elevation
<ul style="list-style-type: none"> <li>• <b>Tropical Humid Climates A:</b> Tropical humid climates exist between Tropic of Cancer and Tropic of Capricorn. The Sun being overhead throughout the year and the presence of Inter Tropical Convergence Zone (ITCZ) make the climate hot and humid. The tropical group is divided into three types, namely: <ul style="list-style-type: none"> <li>• <b>Af-Tropical wet climate:</b> Tropical wet climate is found near the Equator. The major areas are the Amazon Basin in South America, western equatorial Africa and the islands of East Indies. The maximum temperature on any day is around 30°C while the minimum temperature is around 20°C.</li> <li>• <b>Am-Tropical monsoon climate:</b> These type of climate are found over the Indian sub-continent, North Eastern part of South America and Northern Australia.</li> <li>• <b>Aw-Tropical wet and dry climate:</b> This type of climate occurs North and South of Af type climate regions. It borders with dry climate on the western part of the continent and Cf or Cw on the eastern part. The annual rainfall in this climate is considerably less than that in Af and Am climate types and is variable also. Temperature is high throughout the year and diurnal ranges of temperature are the greatest in the dry season. Deciduous forest and tree-shredded grasslands occur in this climate.</li> <li>• <b>Dry Climates B:</b> Dry climates are characterised by very low rainfall that is not adequate for the growth of plants. These climates cover a very large area of the planet extending over large latitudes from 15° - 60° North and South of the Equator. At low latitudes, from 15° - 30°, they occur in the area of subtropical high where subsidence and inversion of temperature do not produce rainfall. In middle latitudes, from 35° - 60° North and South of the Equator, they are confined to the interior of continents where maritime-humid winds do not reach and to areas often surrounded by mountains.</li> <li>• Dry climates are divided into steppe or semi-arid climate (BS) and desert climate (BW).</li> <li>• <b>Subtropical Steppe (BSh) and Subtropical Desert (BWh) Climates:</b> Subtropical steppe (BSh) and subtropical desert (BWh) have common precipitation and temperature characteristics. Located in the transition zone between humid and dry climates, subtropical steppe receives slightly more rainfall than the desert, adequate enough for the growth of sparse grasslands. Fog is common in coastal deserts bordering cold currents. Maximum temperature in the summer is very high. The annual and diurnal ranges of temperature are also high.</li> <li>• <b>Warm Temperate (Mid-Latitude) Climates-C:</b> This type of climates extend from 30° - 50° of latitude mainly on the eastern and western margins of continents. They are grouped into four types: (a) <b>Humid Subtropical Climate (Cwa):</b> Humid subtropical climate occurs poleward of Tropic of Cancer and Capricorn, mainly in North Indian plains and South China interior plains. The climate is similar to Aw climate except that the temperature in winter is warm. (b) <b>Mediterranean Climate (Cs):</b> As the name suggests, Mediterranean climate occurs around the Mediterranean Sea, along the west coast of continents in subtropical latitudes between 30° - 40° latitudes e.g., Central California, Central Chile, along the coast in south eastern and south western Australia. Monthly</li> </ul> </li> </ul>	

average temperature in summer is around 25° C and in winter below 10° C. The annual precipitation ranges between 35 - 90 cm. (c) **Humid Subtropical (Cfa) Climate:** Humid subtropical climate lies on the eastern parts of the continent in subtropical latitudes. In this region the air masses are generally unstable and cause rainfall throughout the year. They occur in eastern United States of America, southern and eastern China, southern Japan, Northeastern Argentina, coastal south Africa and eastern coast of Australia. Thunderstorms in summer and frontal precipitation in winter are common. (d) **Marine West Coast Climate (Cfb):** Marine west coast climate is located poleward from the Mediterranean climate on the west coast of the continents. The main areas are: Northwestern Europe, west coast of North America, north of California, southern Chile, southeastern Australia and New Zealand. The annual and daily ranges of temperature are small. Precipitation occurs throughout the year. Precipitation varies greatly from 50-250cm.

- **Cold Snow Forest Climates (D):** Cold snow forest climates occur in the large continental area in the northern hemisphere between 40°-70° north latitudes in Europe, Asia and North America. The severity of winter is more pronounced in higher latitudes. Cold snow forest climates are divided into two types: (a) **Cold Climate with Humid Winters (Df):** Cold climate with humid winter occurs poleward of marine west coast climate and mid latitude steppe. The frost free season is short. The annual ranges of temperature are large. The weather changes are abrupt and short. Poleward, the winters are more severe. (b) **Cold Climate with Dry Winters (Dw):** Cold climate with dry winter occurs mainly over Northeastern Asia. The development of pronounced winter anti- cyclone and its weakening in summer sets in monsoon like reversal of wind in this region. The annual precipitation is low from 12-15 cm.
- **Polar Climates (E):** Polar climates exist poleward beyond 70° latitude. Polar climates consist of two types: (a) **Tundra Climate (ET):** The tundra climate (ET) is so called after the types of vegetation, like low growing mosses, lichens and flowering plants. This is the region of permafrost where the sub soil is permanently frozen. During summer, the tundra regions have very long duration of day light. (b) **Ice Cap Climate (EF):** The ice cap climate (EF) occurs over interior Greenland and Antarctica. Even in summer, the temperature is below freezing point. This area receives very little precipitation. The snow and ice get accumulated and the mounting pressure causes the deformation of the ice sheets and they break.
- **Highland Climates (H):** Highland climates are governed by topography. In high mountains, large changes in mean temperature occur over short distances. Precipitation types and intensity also vary spatially across high lands. There is vertical zonation of layering of climatic types with elevation in the mountain environment.

**Important Terms Koeppen's scheme of classification of climate:** It is scheme developed by Koeppen. Koeppen identified a close relationship between the distribution of vegetation and climate. **Empirical Classification:** This classification is based on observed data, particularly on temperature and precipitation. **Genetic Classification:** This classification attempts to organise climates according to their causes. **Applied Classification:** This is used when classification is done for specific purpose. **Frontal precipitation:** It results when the leading edge of a warm, moist air mass meets a cool and dry air mass. **Annual rainfall:** It is the total accumulated rainfall in a year. **Diurnal ranges of**

**temperature:** It is the difference between the daily maximum and minimum temperature. **Icebergs:** It is a large piece of freshwater ice that has broken off a glacier or an ice shelf and is floating freely in open water.

## Topic-2 Climate Change, Climate In The Past, Causes Of Climate Change ,Global Warming.

- The type of climate we experience now might be prevailing over the last 10,000 years with minor and occasionally wide fluctuations. The planet earth has witnessed many variations in climate since the beginning. Geological records show alteration of glacial and inter-glacial periods.
- The geomorphological features, especially in high altitudes and high latitudes, exhibit traces of advances and retreats of glaciers. The sediment deposits in glacial lakes also reveal the occurrence of warm and cold periods. The rings in the trees provide clues about wet and dry periods. Historical records describe the vagaries in climate. All these evidences indicate that change in climate is a natural and continuous process.
- India also witnessed alternate wet and dry periods. Archaeological findings show that the Rajasthan desert experienced wet and cool climate around 8,000 B.C.
- The period 3,000-1,700 B.C. had higher rainfall. From about 2,000-1,700 B.C., this region was the centre of the Harappan Civilization. Dry conditions accentuated since then.
- In the geological past, the earth was warm some 500-300 million years ago, through the Cambrian, Ordovician and Silurian periods.
- During the Pleistocene Epoch, glacial and inter-glacial periods occurred, the last major peak glacial period was about 18,000 years ago. The present inter-glacial period started 10,000 years ago.
- Variability in climate occurs all the time. The nineties decade of the last century witnessed extreme weather events. The 1990s recorded the warmest temperature of the century and some of the worst floods around the world. The worst devastating drought in the Sahel region, south of the Sahara Desert, from 1967-1977 is one such variability. During the 1930s, severe drought occurred in southwestern Great Plains of the United States, described as the dust bowl.
- A number of times Europe witnessed warm, wet, cold and dry periods, the significant episodes were the warm and dry conditions in the tenth and eleventh centuries, when the Vikings settled in Greenland. Europe witnessed "Little Ice Age" from 1550 to about 1850. From about 1885-1940 world temperature showed an upward trend. After 1940, the rate of increase in temperature slowed down.
- The causes for climate change are many. They can be grouped into astronomical and terrestrial causes.
- The astronomical causes are the changes in solar output associated with sunspot activities. Sunspots are dark and cooler patches on the sun which increase and decrease in a cyclical manner.
- According to some meteorologists, when the number of sunspots increase, cooler and wetter weather and greater storminess occur. A decrease in sunspot numbers is associated with warm and drier conditions. Yet, these findings are not statistically significant.
- Another astronomical theory is Milankovitch Oscillations, which infer cycles in the variations in the earth's orbital characteristics around the sun, the wobbling of the earth and the changes in the earth's axial tilt.
- All these alter the amount of insolation received from the sun, which in turn, might have a bearing on the climate.
- Volcanism is considered as another cause for climate change. Volcanic eruption throws up lots of aerosols into the atmosphere. These aerosols remain in the atmosphere for a considerable period of time reducing the sun's radiation reaching the Earth's surface.
- The most important anthropogenic effect on the climate is the increasing trend in the concentration of greenhouse gases in the atmosphere which is likely to cause global warming.
- Due to the presence of greenhouse gases, the atmosphere is behaving like a greenhouse. The atmosphere also transmits the incoming solar radiation but absorbs the vast majority of long wave radiation emitted upwards by the earth's surface.
- The gases that absorb long wave radiation are called greenhouse gases. The processes that warm the atmosphere are often collectively referred to as the greenhouse effect.
- The primary GHGs of concern today are carbon dioxide (CO<sub>2</sub>), Chlorofluorocarbons (CFCs), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O) and ozone (O<sub>3</sub>). Some other gases such as nitric oxide (NO) and carbon monoxide (CO) easily react with GHGs and affect their concentration in the atmosphere.
- The effectiveness of any given GHG molecule will depend on the magnitude of the increase in its concentration, its life time in the atmosphere and the wavelength of radiation that it absorbs.
- The chlorofluorocarbons (CFCs) are highly effective. Ozone which absorbs ultra violet radiation in the stratosphere is very effective in absorbing terrestrial radiation when it is present in the lower troposphere.
- Another important point to be noted is that the more time the GHG molecule remains in the atmosphere, the longer it takes for Earth's atmospheric system to recover from any change brought about by the latter.
- The largest concentration of GHGs in the atmosphere is carbon dioxide. The emission of CO<sub>2</sub> comes mainly from fossil fuel combustion (oil, gas and coal). Forests and oceans are the sinks for the carbon dioxide.
- Doubling of concentration of CO<sub>2</sub> over pre-industrial level is used as an index for estimating the changes in climate in climatic models.
- Ozone occurs in the stratosphere where ultra-violet rays convert oxygen into ozone. Thus, ultra violet rays do not reach the earth's surface. The depletion of ozone concentration in the stratosphere is called the ozone hole. This allows the ultra violet rays to pass through the troposphere. International efforts have been initiated for reducing the emission of GHGs into the atmosphere. The most important one is the Kyoto protocol proclaimed in 1997. Kyoto protocol bounds the 35 industrialised countries to reduce their emissions by the year 2012 to 5 per cent less than the levels prevalent in the year 1990.
- The increasing trend in the concentration of GHGs in the atmosphere may, in the long run, warm up the earth. Once the global warming sets in, it will be difficult to reverse it. Rise in the sea level due to melting of glaciers and ice-caps and thermal expansion of the sea may inundate large parts of the coastal area and islands. One of the major concerns of the world today is global warming. An increasing trend in temperature was discernible in the 20th century. The greatest warming of the 20th century was during the two periods, 1901-44 and 1977-99. Over each of these two periods, global temperatures rose by about 0.4°C.



- The globally averaged annual mean temperature at the end of the 20th century was about 0.6°C above that recorded at the end of the 19th century. The seven warmest years during the 1856-2000 were recorded in the last decade. The year 1998 was the warmest year, probably not only for the 20th century but also for the whole millennium.

## Chapter 13 Water (Oceans)

### Topic-1 Hydrological Cycle, Relief Of The Ocean Floor, Divisions Of The Ocean Floor, Minor Relief Features.

- Water is a rare commodity in our solar system. There is no water on the sun or anywhere else in the solar system. The earth, fortunately has an abundant supply of water on its surface. Hence, our planet is called the 'Blue Planet'.

#### Water on the Earth's surface

Reservoir	Volume [Million Cubic km J]	Percentage of the Total
Oceans	1,370	97.25
Ice Caps and Glaciers	29	2.05
Groundwater	9.5	0.68
Lakes	0.125	0.01
Soil Moisture	0.065	0.005
Atmosphere	0.013	0.001
Streams and Rivers	0.0017	0.0001
Biosphere	0.0006	0.00004

- Water is a cyclic resource. It can be used and re-used. Water also undergoes a cycle from the ocean to land and land to ocean. The water cycle has been working for billions of years and all the life on earth depends on it. The distribution of water on earth is quite uneven. The hydrological cycle, is the circulation of water within the earth's hydrosphere in different forms i.e. the liquid, solid and the gaseous phases.

#### Components and Processes of the Water Cycle

Water Exist	Processes
Water storage in oceans	Evaporation, Evapo transpiration, Sublimation
Water in the atmosphere	Condensation Precipitation
Water storage in Ice and snow	Snowmelt runoff to streams
Surface runoff	Stream flow freshwater storage infiltration
Groundwater storage	Groundwater discharge springs

- Nearly 59 per cent of the water that falls on land returns to the atmosphere through evaporation from over the oceans as well as from other places. It is to be noted that the renewable water on the earth is constant while the demand is increasing tremendously. The oceans are confined to the great depressions of the earth's outer layer.
- The geographers have divided the oceanic part of the earth into four oceans, namely the Pacific, the Atlantic, the Indian and the Arctic. The various seas, bays, gulfs and other inlets are parts of these four large oceans.
- A major portion of the ocean floor is found between 3-6 km below the sea level. The floors of the oceans are rugged with the world's largest mountain ranges, deepest trenches and the largest plains.
- The ocean floors can be divided into four major

divisions:

- **The Continental Shelf:** The continental shelf is the extended margin of each continent occupied by relatively shallow seas and gulfs. It is the shallowest part of the ocean showing an average gradient of 1° or even less. The shelf typically ends at a very steep slope, called the shelf break. The continental shelves are covered with variable thicknesses of sediments brought down by rivers, glaciers, wind, from the land and distributed by waves and currents.

- **The Continental Slope:** The continental slope connects the continental shelf and the ocean basins. It begins where the bottom of the continental shelf sharply drops off into a steep slope. The depth of the slope region varies between 200 and 3,000 m. The slope boundary indicates the end of the continents. Canyons and trenches are observed in this region.

- **The Deep Sea Plain:** Deep sea plains are gently sloping areas of the ocean basins. These are the flattest and smoothest regions of the world. These plains are covered with fine-grained sediments like clay and silt.

- **The Oceanic Deeps:** These areas are the deepest parts of the oceans. The trenches are relatively steep sided, narrow basins. They are some 3-5 km deeper than the surrounding ocean floor. As many as 57 deeps have been explored so far; of which 32 are in the Pacific Ocean; 19 in the Atlantic Ocean and 6 in the Indian Ocean.

- Some of the minor relief features are:

- **Mid-Oceanic Ridges:** A mid-oceanic ridge is composed of two chains of mountains separated by a large depression. The mountain ranges can have peaks as high as 2,500 m and some even reach above the ocean's surface.

- **Seamount:** It is a mountain with pointed summits, rising from the seafloor that does not reach the surface of the ocean. Seamounts are volcanic in origin. These can be 3,000-4,500 m tall.

- **Submarine Canyons:** These are deep valleys, some comparable to the Grand Canyon of the Colorado river. They are sometimes found cutting across the continental shelves and slopes, often extending from the mouths of large rivers.

- **Guyots:** It is a flat topped seamount. It is estimated that more than 10,000 seamounts and guyots exist in the Pacific Ocean alone.

- **Atoll:** These are low islands found in the tropical oceans consisting of coral reefs surrounding a central depression.

### Topic-2 Temperature Of Ocean Waters, Factors Affecting Temperature Distribution, Horizontal And Vertical Distribution Of Temperature

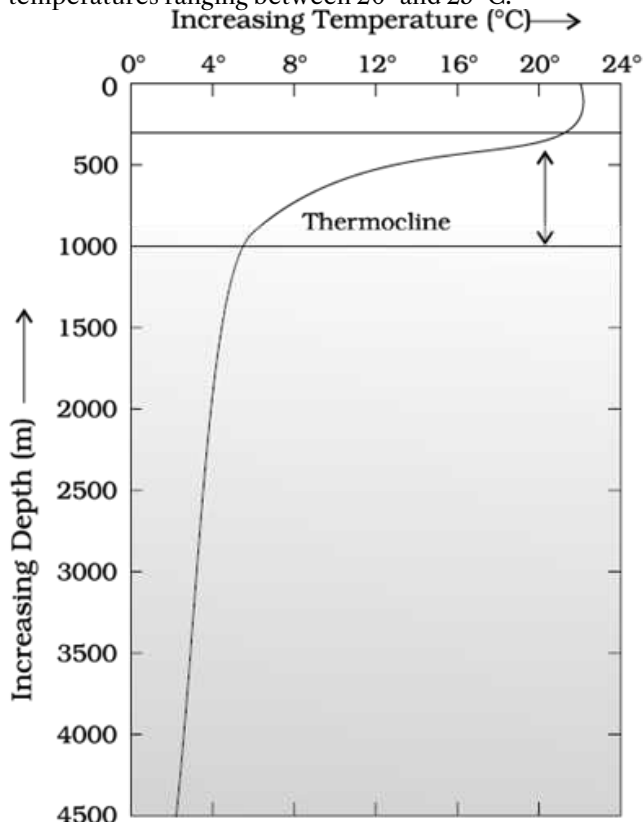
Ocean waters get heated up by the solar energy just as land. The process of heating and cooling of the oceanic water is slower than land. The factors which affect the distribution of temperature of ocean water are:

- **Latitude:** The temperature of surface water decreases from the Equator towards the poles because the amount of insolation decreases poleward.

- **Unequal distribution of land and water:** The oceans in the Northern Hemisphere receive more heat due to their contact with larger extent of land than the oceans in the Southern Hemisphere.

- **Prevailing wind:** The winds blowing from the land towards the oceans drive warm surface water away from the coast resulting in the upwelling of cold water from below.

- **Ocean currents:** Warm ocean currents raise the temperature in cold areas while the cold currents decrease the temperature in warm ocean areas.
- The temperature-depth profile for the ocean water shows how the temperature decreases with the increasing depth. This boundary region, from where there is a rapid decrease of temperature, is called the thermocline. About 90 per cent of the total volume of water is found below the thermocline in the deep ocean. In this zone, temperatures approach 0° C.
- The temperature structure of oceans over middle and low latitudes can be described as a three-layer system from surface to the bottom.
- The first layer represents the top layer of warm oceanic water and it is about 500m thick with temperatures ranging between 20° and 25° C.



- The second layer called the thermocline layer lies below the first layer and is characterised by rapid decrease in temperature with increasing depth.
- The highest temperature is not recorded at the equator but slightly towards north of it. The average annual temperatures for the Northern and Southern Hemisphere are around 19° C and 16° C respectively. It is a well known fact that the maximum temperature of the oceans is always at their surfaces because they directly receive the heat from the sun and the heat is transmitted to the lower sections of the oceans through the process of conduction.
- The temperature falls very rapidly up to the depth of 200 m and thereafter, the rate of decrease of temperature is slowed down.

### Topic-3 Salinity Of Ocean Waters, Horizontal Distribution Of Salinity, Vertical Distribution Of Salinity

- All waters in nature, whether rain water or ocean water, contain dissolved mineral salts. Salinity is the term used to define the total content of dissolved salts in sea water. It is calculated as the amount of salt (in gm) dissolved in 1,000 gm (1 kg) of seawater. Salinity of 24.7 ‰ has been considered as the upper limit to demarcate 'brackish water'.

### Dissolved Salts in Sea Water (gm of Salt per kg of Water)

Chlorine	18.97
Sodium	10.47
Sulphate	2.65
Magnesium	1.28
Calcium	0.41
Potassium	0.38
Bicarbonate	0.14
Bromine	0.06
Borate	0.02
Strontium	0.01

- Factors affecting ocean salinity are mentioned below: The salinity of water in the surface layer of oceans depend mainly on evaporation and precipitation. Surface salinity is greatly influenced in coastal regions by the fresh water flow from rivers, and in polar regions by the processes of freezing and thawing of ice. Wind, also influences salinity of an area by transferring water to other areas.
- The ocean currents contribute to the salinity variations. Salinity, temperature and density of water are interrelated. The salinity for normal open ocean ranges between 33‰ and 37‰. In hot and dry regions, where evaporation is high, the salinity sometimes reaches to 70‰.
- The average salinity of the Atlantic Ocean is around 36‰. The highest salinity is recorded between 15° and 20° latitudes. Maximum salinity (37‰) is observed between 20° N and 30° N and 20° W – 60.
- The North Sea, in spite of its location in higher latitudes, records higher salinity due to more saline water brought by the North Atlantic Drift.
- The Baltic Sea records low salinity due to influx of river waters in large quantity.
- The average salinity of the Indian Ocean is 35‰. The low salinity trend is observed in the Bay of Bengal due to influx of river water by the River Ganga.
- Salinity changes with depth, but the way it changes depends upon the location of the sea.
- Salinity at depth is very much fixed, because there is no way that water is 'lost', or the salt is 'added.'
- The lower salinity water rests above the higher salinity dense water.
- Salinity, generally, increases with depth and there is a distinct zone called the halocline, where salinity increases sharply.
- High salinity seawater, generally, sinks below the lower salinity water. This leads to stratification by salinity. **Halocline:** Salinity, generally, increases with depth and there is a distinct zone called the halocline, where salinity increases sharply

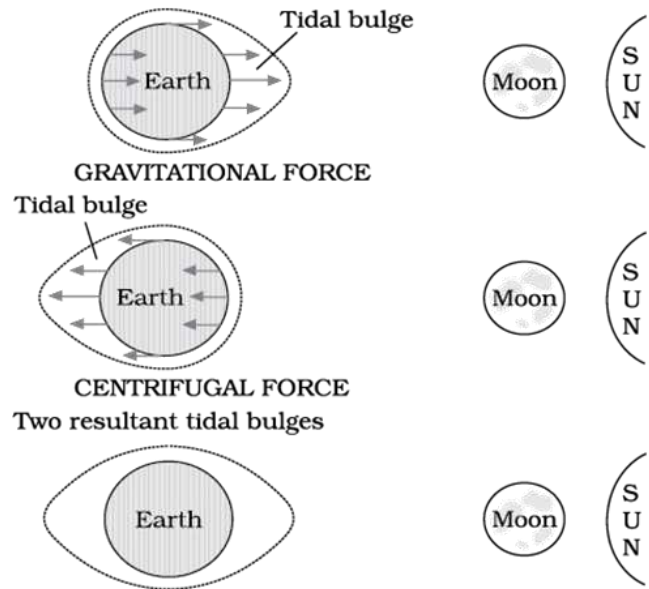
## Chapter 14 Movements Of Ocean Water

### Topic-1 Waves, Tides, Types Of Tides, Importance Of Tides

- The ocean water is dynamic. Its physical characteristics like temperature, salinity, density and the external forces like of the sun, moon and the winds influence the movement of ocean water. The horizontal motion refers to the ocean currents and waves. The vertical motion refers to tides. The vertical motion refers to the rise and fall of water in the oceans and seas.
- Ocean currents are the continuous flow of huge amount of water in a definite direction while the waves are the horizontal motion of water. Water moves ahead

from one place to another through ocean currents while the water in the waves does not move, but the wave trains move ahead.

- Due to attraction of the sun and the moon, the ocean water is raised up and falls down twice a day.
- Waves are actually the energy, not the water as such, which moves across the ocean surface. Wind provides energy to the waves. Wind causes waves to travel in the ocean and the energy is released on shorelines.
- As a wave approaches the beach, it slows down. This is due to the friction occurring between the dynamic water and the sea floor. Most of the waves are caused by the wind driving against water. Waves may travel thousands of km before rolling ashore, breaking and dissolving as surf. A wave's size and shape reveal its origin. Steep waves are fairly young ones and are probably formed by local wind. Slow and steady waves originate from far away places, possibly from another hemisphere. Waves travel because wind pushes the water body in its course while gravity pulls the crests of the waves downward.
- The periodical rise and fall of the sea level, once or twice a day, mainly due to the attraction of the sun and the moon, is called a tide. Movement of water caused by meteorological effects (winds and atmospheric pressure changes) are called surges. The study of tides is very complex, spatially and temporally, as it has great variations in frequency, magnitude and height.
- The moon's gravitational pull to a great extent and to a lesser extent the sun's gravitational pull, are the major causes for the occurrence of tides.
- Another factor is centrifugal force, which is the force that acts to counter the balance the gravity.
- On the side of the earth facing the moon, a tidal bulge occurs while on the opposite side though the gravitational attraction of the moon is less as it is farther away, the centrifugal force causes tidal bulge on the other side.
- The 'tide-generating' force is the difference between these two forces; *i.e.*, the gravitational attraction of the moon and the centrifugal force.
- On the surface of the earth, nearest the moon, pull or the attractive force of the moon is greater than the centrifugal force, and so there is a net force causing a bulge towards the moon.
- On the opposite side of the earth, the attractive force is less, as it is farther away from the moon, the centrifugal force is dominant. Hence, there is a net force away from the moon. It creates the second bulge away from the moon.
- When the tide is channelled between islands or into bays and estuaries they are called tidal currents. Tides may be grouped into various types based on their frequency of occurrence in one day or 24 hours or based on their height.
- **Tides based on Frequency:**
- **Semi-diurnal tide:** The most common tidal pattern, featuring two high tides and two low tides each day. The successive high or low tides are approximately of the same height.
- **Diurnal tide:** There is only one high tide and one low tide during each day. The successive high and low tides are approximately of the same height.
- **Mixed tide:** Tides having variations in height are known as mixed tides. These tides generally occur along the west coast of North America and on many islands of the Pacific Ocean.



### Gravitational and Centrifugal Forces

#### • Tides based on the Sun, Moon and the Earth Positions:

- **Spring tides:** The position of both the sun and the moon in relation to the earth has direct bearing on tide height.
- **Neap tides:** Normally, there is a seven day interval between the spring tides and neap tides. At this time the sun and moon are at right angles to each other and the forces of the sun and moon tend to counteract one another.
- Once in a month, when the moon's orbit is closest to the earth (perigee), unusually high and low tides occur. During this time the tidal range is greater than normal.
- Two weeks later, when the moon is farthest from earth (apogee), the moon's gravitational force is limited and the tidal ranges are less than their average heights.
- The time between the high tide and low tide, when the water level is falling, is called the ebb. The time between the low tide and high tide, when the tide is rising, is called the flow or flood.
- Since tides are caused by the earth-moon-sun positions which are known accurately, the tides can be predicted well in advance. This helps the navigators and fishermen plan their activities.
- Tidal flows are of great importance in navigation.
- Tidal heights are very important, especially harbours near rivers and within estuaries having shallow 'bars' at the entrance, which prevent ships and boats from entering into the harbour.
- Tides are also helpful in desilting the sediments and in removing polluted water from river estuaries.
- Tides are used to generate electrical power (in Canada, France, Russia, and China). A 3 MW tidal power project at Durgaduani in Sunderbans of West Bengal is under way.

**Important Terms** **Perigee:** Once in a month, when the moon's orbit is closest to the earth, unusually high and low tides occur, it is called perigee. **Apogee:** When the moon is farthest from earth, the moon's gravitational force is limited and the tidal ranges are less than their average heights, it is called apogee. **Perihelion:** When the earth is closest to the sun. **Aphelion:** When the earth is farthest from the sun. **Flow:** The time between the low tide and high tide, when the tide is rising, is called the flow or flood. **Ebb:** The time between the high tide and low tide, when the water level is falling, is called the ebb.

### Topic-2 Ocean Currents, Types Of Ocean Currents



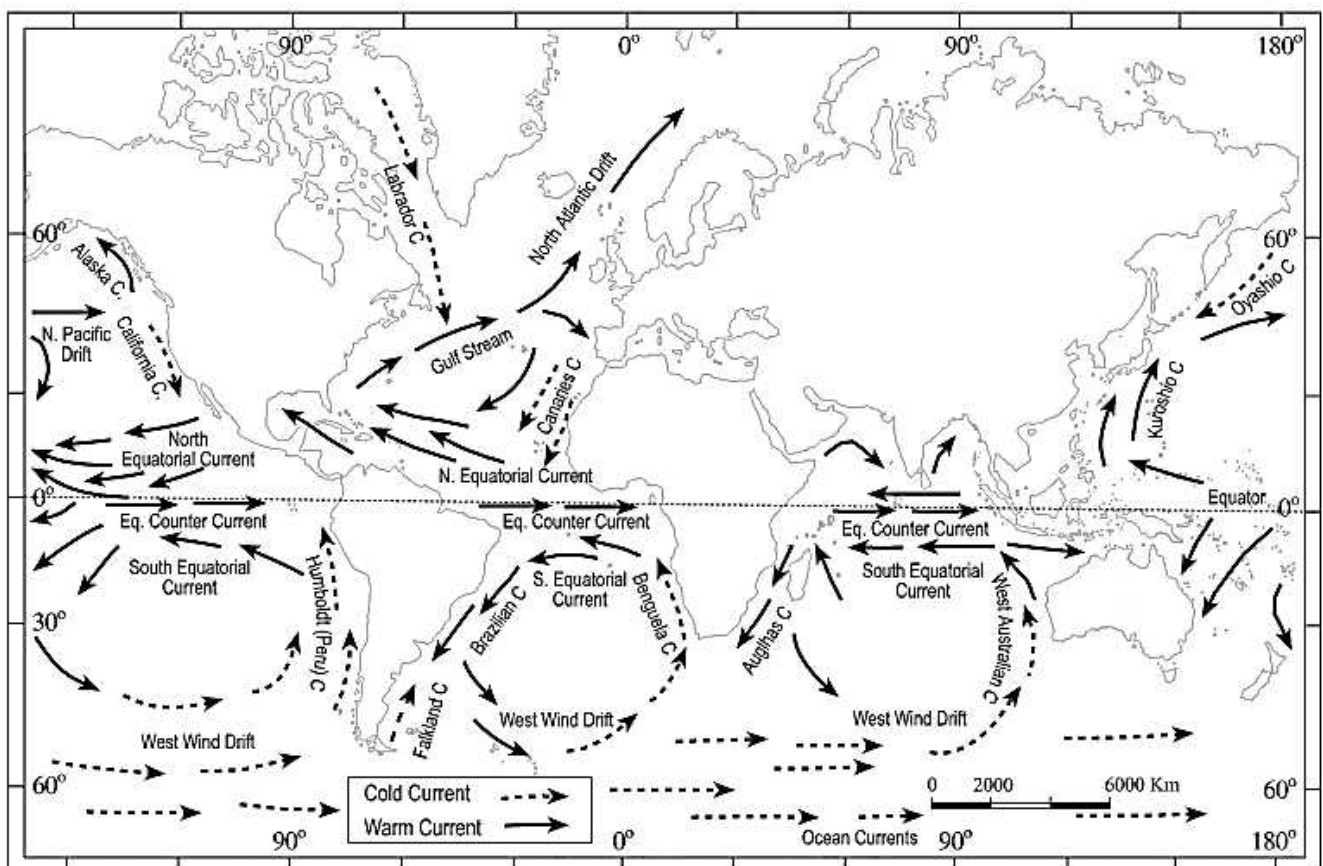
- Ocean currents are like river flow in oceans. They represent a regular volume of water in a definite path and direction.
- **Ocean currents are influenced by two types of forces namely:** The primary forces that influence the currents are: **Heating by solar energy:** Heating by solar energy causes the water to expand. That is why, near the equator the ocean water is about 8 cm higher in level than in the middle latitudes. **Wind:** Wind blowing on the surface of the ocean pushes the water to move. Friction between the wind and the water surface affects the movement of the water body in its course. **Gravity:** Gravity tends to pull the water down to pile and create gradient variation. **Coriolis force:** The coriolis force intervenes and causes the water to move to the right in the Northern Hemisphere and to the left in the Southern Hemisphere.
- **The secondary forces that influence the currents to flow:** Water with high salinity is denser than water with low salinity and in the same way cold water is denser than warm water. Denser water tends to sink, while relatively lighter water tends to rise. Cold-water ocean currents occur when the cold water at the poles sinks and slowly moves towards the equator.

**The ocean currents may be classified based on their depth as surface currents and deep water currents:**

- **Surface currents:** Constitute about 10 per cent of all the water in the ocean, these waters are the upper 400 m of the ocean.
- **Deep water currents:** Make up the other 90 per cent of the ocean water. These waters move around the ocean basins due to variations in the density and gravity.
- **Ocean currents can also be classified based on**

**temperature: As cold currents and warm currents:**

- **Cold currents:** Bring cold water into warm water areas. These currents are usually found on the west coast of the continents in the low and middle latitudes (true in both hemispheres) and on the east coast in the higher latitudes in the Northern Hemisphere.
- **Warm currents:** Bring warm water into cold water areas and are usually observed on the east coast of continents in the low and middle latitudes (true in both hemispheres). In the Northern Hemisphere they are found on the west coasts of continents in high latitudes.
- Major ocean currents are greatly influenced by the stresses exerted by the prevailing winds and Coriolis Force.
- Due to the coriolis force, the warm currents from low latitudes tend to move to the right in the Northern Hemisphere and to their left in the Southern Hemisphere.
- The oceanic circulation transports heat from one latitude belt to another in a manner similar to the heat transported by the general circulation of the atmosphere.
- Ocean currents have a number of direct and indirect influences on human activities.
- Their average temperatures are relatively low with a narrow diurnal and annual ranges.
- Warm currents flow parallel to the east coasts of the continents in tropical and subtropical latitudes. This results in warm and rainy climates.
- The mixing of warm and cold currents helps to replenish the oxygen and favour the growth of planktons, the primary food for fish population. The best fishing grounds of the world exist mainly in these mixing zones.



### Effects Of Ocean Currents

Ocean currents have a number of direct and indirect influences on human activities. West coasts of the continents in tropical and subtropical latitudes (except

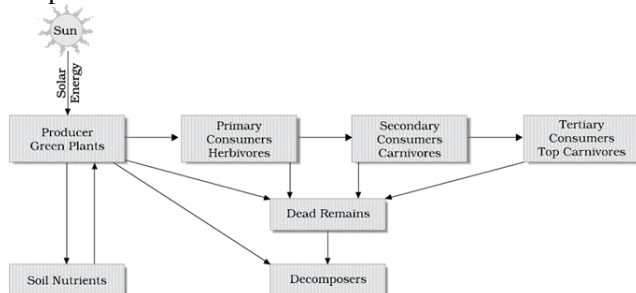
close to the equator) are bordered by cool waters. Their average temperatures are relatively low with a narrow diurnal and annual ranges. There is fog, but generally the areas are arid. West coasts of the continents in the middle and higher latitudes are bordered by warm

waters which cause a distinct marine climate. They are characterised by cool summers and relatively mild winters with a narrow annual range of temperatures. Warm currents flow parallel to the east coasts of the continents in tropical and subtropical latitudes. This results in warm and rainy climates. These areas lie in the western margins of the subtropical anti-cyclones. The mixing of warm and cold currents help to replenish the oxygen and favour the growth of planktons, the primary food for fish population. The best fishing grounds of the world exist mainly in these mixing zones.

## Chapter 15 Life On The Earth

There are three major realms of the environment, that is, the lithosphere, the atmosphere and the hydrosphere. The living organisms of the earth, constituting the biosphere, interact with other environmental realms.

- The biosphere includes all the living components of the earth. It consists of all plants and animals, including all the micro-organisms that live on the planet earth and their interactions with the surrounding environment. The biosphere and its components are very significant elements of the environment. These elements interact with other components of the natural landscape such as land, water and soil.
- The interactions of biosphere with land, air and water are important to the growth. The interactions of a particular group of organisms with abiotic factors within a particular habitat resulting in clearly defined energy flows and material cycles on land, water and air, are called ecological systems.
- The term ecology is derived from the Greek word 'oikos' meaning 'house', combined with the word 'logy' meaning the 'science of' or 'the study of'. Literally, ecology is the study of the earth as a 'household', of plants, human beings, animals and micro-organisms.
- A habitat in the ecological sense is the totality of the physical and chemical factors that constitute the general environment.
- A system consisting of biotic and abiotic components is known as ecosystem. All these components in ecosystem are inter related and interact with each other. Different types of ecosystems exist with varying ranges of environmental conditions where various plants and animal species have got adapted through evolution. This phenomenon is known as ecological adaptation.



- Ecosystems are of **two** major types: terrestrial and aquatic.
- Terrestrial ecosystem can be further be classified into 'biomes'. A biome is a plant and animal community that covers a large geographical area.
- A biome can be defined as the total assemblage of plant and animal species interacting within specific conditions. These include rainfall, temperature, humidity and soil conditions.

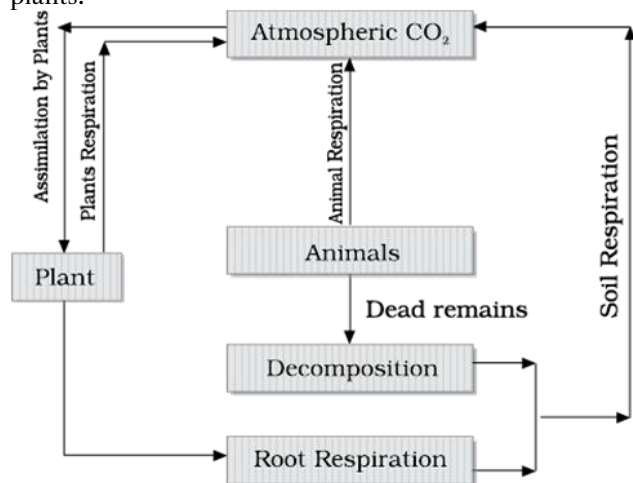
- Some of the major biomes of the world are: forest, grassland, desert and tundra biomes.
- Aquatic ecosystems can be classed as marine and freshwater ecosystems. Marine ecosystem includes the oceans, coastal estuaries and coral reefs. Freshwater ecosystem includes lakes, ponds, streams, marshes and bogs.
- From a structural point of view, all ecosystems consist of abiotic and biotic factors.
- Abiotic factors include rainfall, temperature, sunlight, atmospheric humidity, soil conditions, inorganic substances (carbon dioxide, water, nitrogen, calcium, phosphorus, potassium, etc.).
- Biotic factors include the producers, (primary, secondary, tertiary) the consumers and the decomposers. The producers include all the green plants, which manufacture their own food through photosynthesis.
- The primary consumers include herbivorous animals like deer, goats, mice and all plant-eating animals.
- The secondary consumers *i.e.*, carnivores include all the flesh-eating animals like snakes, tigers and lions.
- Decomposers are those that feed on dead organisms (for example, scavengers like vultures and crows), and further breaking down of the dead matter by other decomposing agents like bacteria and various microorganisms.
- Organisms of an ecosystem are linked together through a food chain.
- For example, a plant eating beetle feeding on a paddy stalk is eaten by a frog, which is, in turn, eaten by a snake, which is then consumed by a hawk. This sequence of eating and being eaten and the resultant transfer of energy from one level to another is known as the food-chain.
- Transfer of energy that occurs during the process of a foodchain from one level to another is known as flow of energy.
- The food- chains get interlocked with one another. This interconnecting network of species is known as food web. Generally, two types of food-chains are recognised: grazing food-chain and detritus food-chain.
- In a grazing food-chain, the first level starts with plants as producers and ends with carnivores as consumers as the last level, with the herbivores being at the intermediate level. There is a loss of energy at each level which may be through respiration, excretion or decomposition.
- A detritus food-chain is based on autotrophs energy capture initiated by grazing animals and involves the decomposition or breaking down of organic wastes and dead matter derived from the grazing food-chain.

### Topic-2 Types Of Biomes, Biogeochemical Cycles, Ecological Balance.

- There are five major biomes — forest, desert, grassland, aquatic and altitudinal biomes.
- The Sun is the basic source of energy on which all life depends.
- During photosynthesis, carbon dioxide is converted into organic compounds and oxygen. Out of the total solar insolation that reaches the earth's surface, only a very small fraction (0.1 per cent) is fixed in photosynthesis.
- More than half are used for plant respiration and the remaining part is temporarily stored or is shifted to other portions of the plant.
- Studies have shown that for the last one billion years,

the atmosphere and hydrosphere have been composed of approximately the same balance of chemical components.

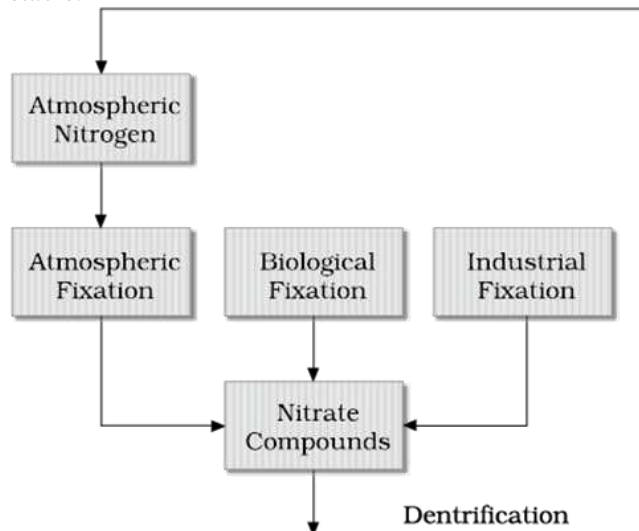
- This balance of the chemical elements is maintained by a cyclic passage through the tissues of plants and animals.
- These cyclic movements of chemical elements of the biosphere between the organism and the environment are referred to as biogeochemical cycles. 'Bio' refers to living organisms and 'geo' to rocks, soil, air and water of the earth.
- There are two types of biogeochemical cycles: the gaseous and the sedimentary cycle.
- In the gaseous cycle, the main reservoir of nutrients is the atmosphere and the ocean. In the sedimentary cycle, the main reservoir is the soil and the sedimentary and other rocks of the earth's crust. All living organisms, the atmosphere and the lithosphere maintain between them a circulation of water in solid, liquid or gaseous form referred to as the water or hydrologic cycle.
- The carbon cycle is mainly the conversion of carbon dioxide. This conversion is initiated by the fixation of carbon dioxide from the atmosphere through photosynthesis. During this process, more carbon dioxide is generated and is released through its leaves or roots during the day. The remaining carbohydrates not being utilised by the plant become part of the plant tissue. Oxygen is the main by-product of photosynthesis. It is involved in the oxidation of carbohydrates with the release of energy, carbon dioxide and water. The cycling of oxygen is a highly complex process. Oxygen occurs in a number of chemical forms and combination. Much of oxygen is produced from the decomposition of water molecules by sunlight during photosynthesis and is released in the atmosphere through transpiration and respiration processes of plants.



- Nitrogen is a major constituent of the atmosphere comprising about seventy-nine per cent of the atmospheric gases. Only a few types of organisms like certain species of soil bacteria and blue green algae are capable of utilising it directly in its gaseous form. Generally, nitrogen is usable only after it is fixed. Ninety per cent of fixed nitrogen is biological. Nitrogen can also be fixed in the atmosphere by lightning and cosmic radiation. Dead plants and animals, excretion of nitrogenous wastes are converted into nitrates by the action of bacteria present in the soil.
- There are still other types of bacteria capable of converting nitrates into free nitrogen, a process known as denitrification. Other than carbon, oxygen, nitrogen and hydrogen being the principal geochemical components of the biosphere, many other minerals also occur as

critical nutrients for plant and animal life.

- All living organisms fulfil their mineral requirements from mineral solutions in their environments.
- Ecological balance is a state of dynamic equilibrium within a community of organisms in a habitat or ecosystem.
- It can happen when the diversity of the living organisms remains relatively stable.
- This occurs through competition and cooperation between different organisms where population remains stable.



- This balance is also attained by the fact that some species depend on others for their food and sustenance.
- In the plants, any disturbance in the native forests such as clearing the forest for shifting cultivation usually brings about a change in the species distribution.
- This change is due to competition where the secondary forest species such as grasses, bamboos or pines overtakes the native species changing the original forest structure. This is called succession.
- Ecological balance may be disturbed due to the introduction of new species, natural hazards or human causes.
- Human pressure on the earth's resources has put a heavy toll on the ecosystem.
- Ecological imbalances have brought many natural calamities like floods, landslides, diseases, erratic climatic occurrences, etc.

**Important Terms Biogeochemical cycles:** The cyclic movements of chemical elements of the biosphere between the organism and the environment are referred to as biogeochemical cycles. **Gaseous cycle:** In the gaseous cycle, the main reservoir of nutrients is the atmosphere and the ocean. **Sedimentary cycle:** In the sedimentary cycle, the main reservoir is the soil and the sedimentary and other rocks of the earth's crust. **Photosynthesis:** The process by which green plants and some other organisms use sunlight to synthesize nutrients from carbon dioxide and water.

**Denitrification:** Some bacteria can even convert nitrates into nitrates that can be used again by green plants. There are still other types of bacteria capable of converting nitrates into free nitrogen, a process known as denitrification.

## Chapter 16 Biodiversity And Conservation

- Biodiversity as we have today is the result of 2.5-3.5 billion years of evolution. Before the advent of humans, our earth supported more biodiversity than in any other period.
- The number of species globally vary from 2 million to 100 million, with 10 million being the best estimate. New

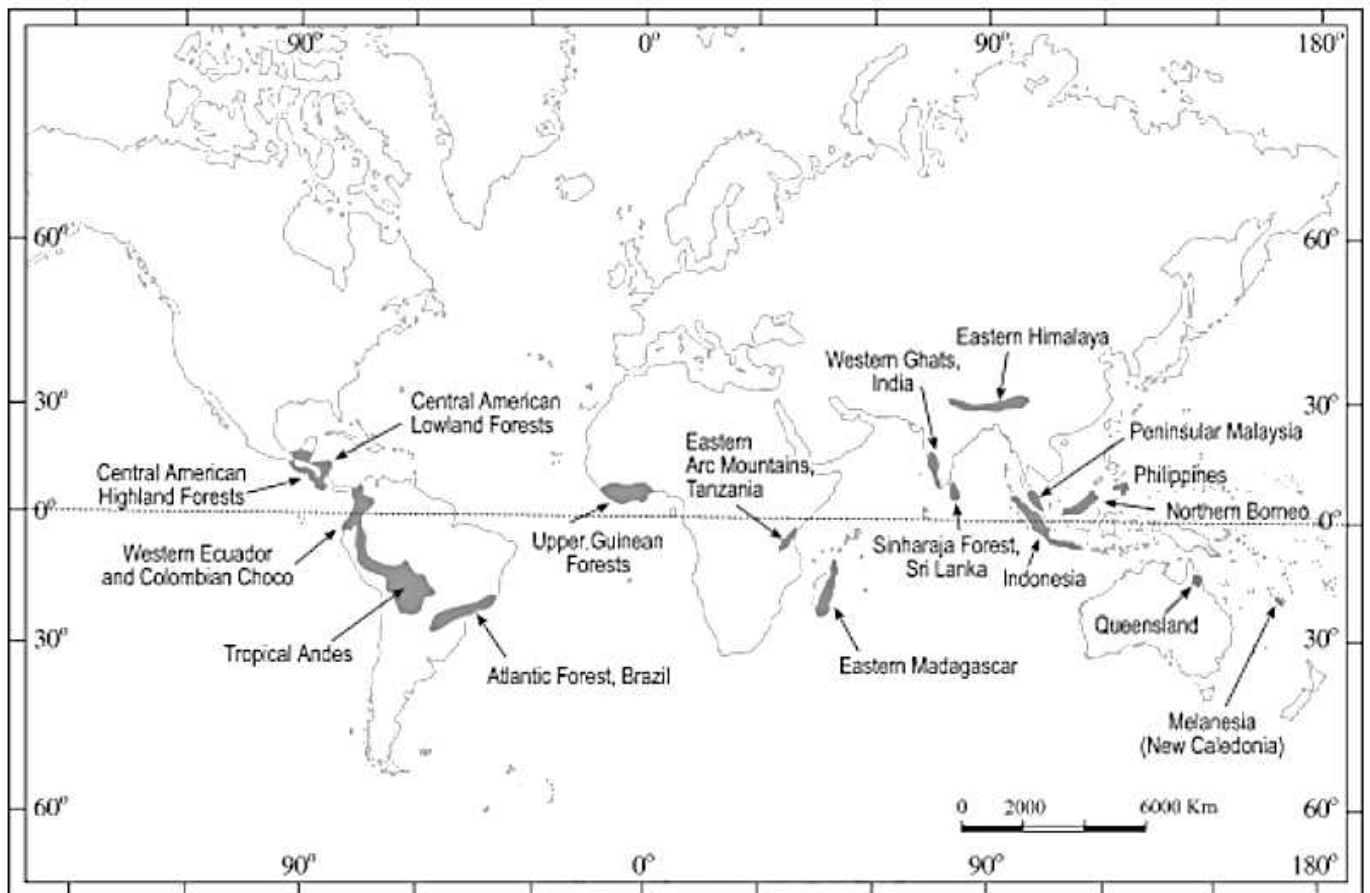


species are regularly discovered most of which are yet to be classified (an estimate states that about 40 per cent of fresh water fishes from South America are not classified yet). Tropical forests are very rich in biodiversity.

- Biodiversity is a system in constant evolution, from a view point of species, as well as from view point of an individual organism.
- Biodiversity is not found evenly on the earth. It is consistently richer in the tropics. As one approaches the polar regions, one finds larger and larger populations of fewer and fewer species.
- Biodiversity is our living wealth. It is a result of hundreds of millions of years of evolutionary history.
- **Genetic biodiversity:** It refers to the variation of genes within species. Groups of individual organisms having certain similarities in their physical characteristics are called species. The genetic diversity is essential for a healthy breeding of population of species.
- **Species Diversity:** This refers to the variety of species. It relates to the number of species in a defined area. The diversity of species can be measured through its richness, abundance and types.
- **Ecosystem diversity:** The broad differences between ecosystem types and the diversity of habitats and ecological processes occurring within each ecosystem type constitute the ecosystem diversity.
- Biodiversity plays the following roles:
  - **Ecological role:** The more diverse an ecosystem, better are the chances for the species to survive through adversities and attacks, and consequently, is more productive. Hence, the loss of species would decrease the ability of the system to maintain itself. Just like a species with a high genetic diversity, an ecosystem with high biodiversity may have a greater chance of adapting to environmental change. In other words, the more the variety of species in an ecosystem, the more stable the ecosystem is likely to be.
  - **Economic role:** Some of the important economic commodities that biodiversity supplies to humankind are: food crops, livestock, forestry, fish, medicinal resources, etc.
  - **Scientific role:** Biodiversity also helps in understanding how life functions and the role of each species in sustaining ecosystems of which we are also a species. This fact must be drawn upon every one of us so that we live and let other species also live their lives.
- Since the last few decades, growth in human population has increased the rate of consumption of natural resources.
- It has accelerated the loss of species and habitation in different parts of the world. Tropical regions which occupy only about one-fourth of the total area of the world, contain about three fourth of the world human population.
- Overexploitation of resources and deforestation have become rampant to fulfil the needs of large population.
- Natural calamities such as earthquakes, floods, volcanic eruptions, forest fires, droughts, etc. cause damage to the flora and fauna of the earth, bringing change the biodiversity of respective affected regions.
- Pesticides and other pollutants such as hydrocarbons and toxic heavy metals destroy the weak and sensitive species.
- During the last few decades, some animals like tigers,

elephants, rhinoceros, crocodiles, minks and birds were hunted mercilessly by poachers for their horn, tusks, hides, etc. It has resulted in the rendering of certain types of organisms as endangered category.

- The International Union of Conservation of Nature and Natural Resources (IUCN) has classified the threatened species of plants and animals into **three** categories for the purpose of their conservation.
- **Endangered Species:** It includes those species which are in danger of extinction.
- **Vulnerable Species:** This includes the species which are likely to be in danger of extinction in near future if the factors threatening to their extinction continue.
- **Rare Species:** Population of these species is very small in the world; they are confined to limited areas or thinly scattered over a wider area.
- There is an urgent need to educate people to adopt environment-friendly practices and reorient their activities in such a way that our development is harmonious with other life forms and is sustainable.
- The critical problem is not merely the conservation of species nor the habitat but the continuation of process of conservation.
- The Government of India along with 155 other nations have signed the Convention of Biodiversity at the Earth Summit held at Rio-de Janeiro, Brazil in June 1992.
- The world conservation strategy has suggested the following steps for biodiversity conservation:
  - Efforts should be made to preserve the species that are endangered.
  - Prevention of extinction requires proper planning and management.
  - Varieties of food crops, forage plants, timber trees, livestock, animals and their wild relatives should be preserved.
  - Each country should identify habitats of wild relatives and ensure their protection.
  - Habitats where species feed, breed, rest and nurse their young should be safeguarded and protected.
  - International trade in wild plants and animals be regulated.
  - There are some countries which are situated in the tropical region; they possess a large number of the world's species diversity.
  - They are called mega diversity centres. There are 12 such countries, namely Mexico, Columbia, Ecuador, Peru, Brazil, Zaire, Madagascar, China, India, Malaysia, Indonesia and Australia in which these centres are located.
  - In order to concentrate resources on those areas that are most vulnerable, the International Union for the Conservation of Nature and Natural Resources (IUCN) has identified certain areas as biodiversity hotspots.
  - Hotspots are defined according to their vegetation. Plants are important because these determine the primary productivity of an ecosystem. Most, but not all, of the hotspots rely on species rich ecosystems for food, firewood, cropland, and income from timber.
  - In Madagascar about 85 percent of the plants and animals are found nowhere else in the world. Other hotspots in wealthy countries are facing different types of pressure.
  - The Islands of Hawaii have many unique plants and animals that are threatened by introduces species and land development.



*Ecological 'hotspots' in the world*

# NCERT Class 11

## Geography India

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 India – Location

- The mainland of India, extends from Kashmir in the North to Kanyakumari in the South and Arunachal Pradesh in the East to Gujarat in the West.
- India's territorial limit further extends towards the sea upto 12 nautical miles (about 21.9 km) from the coast.
- Our southern boundary extends upto 6°45' N latitude in the Bay of Bengal.
- If you work out the latitudinal and longitudinal extent of India, they are roughly about 30 degrees, whereas the actual distance measured from North to South extremity is 3,214 km and that from east to west only 2,933 km.
- From the values of latitude, it is understood that the southern part of the country lies within the tropics and the northern part lies in the sub-tropical zone or the warm temperate zone.
- From the values of longitude, it is quite discernible that there is a variation of nearly 30 degrees, which causes a time difference of nearly two hours between the easternmost and the westernmost parts of our country.
- There is a general understanding among the countries of the world to select the standard meridian in multiples of 7°30' of longitude. That is why 82°30' E has been selected as the 'Standard Meridian' of India. Indian Standard Time is ahead of Greenwich Mean Time by 5 hours and 30 minutes.
- India with its area of 3.28 million sq. km accounts for 2.4 per cent of the world's land surface area and stands as the seventh largest country in the world.
- The size of India has endowed her with great physical diversity.
- India has the presence of lofty mountains in the North; large rivers such as Ganga, Brahmaputra, Mahanadi, Krishna, Godavari and Kaveri; green forested hills in North East and South India; and the vast sandy expanse of Marusthali.
- Bounded by the Himalayas in the North, Hindukush and Sulaiman ranges in the North West, Purvachal hills in the North-East and by the large expanse of the Indian ocean in the South, it forms a great geographic entity known as the Indian subcontinent. It includes the countries — Pakistan, Nepal, Bhutan, Bangladesh and India.
- The Himalayas, together with other ranges, have acted as a formidable physical barrier in the past.
- Except for a few mountain passes such as the Khyber, the Bolan, the Shipkila, the Nathula, the Bomdila, etc., it was difficult to cross it.
- Peninsular part of India extends towards the Indian Ocean. This has provided the country with a coastline of 6,100 km in the mainland and 7,517 km in the entire geographical coast of the mainland plus the island groups Andaman and Nicobar located in the Bay of Bengal and the Lakshadweep in the Arabian Sea.
- India is located in the south-central part of the

continent of Asia, bordering the Indian ocean and its two arms extending in the form of Bay of Bengal and the Arabian Sea. This maritime location of Peninsular India has provided links to its neighbouring regions through the sea and air routes.

- Sri Lanka and Maldives are the two island countries located in the Indian Ocean, which are our neighbours. Sri Lanka is separated from India by the Gulf of Mannar and Palk Strait.

#### Chapter 2 Structure And Physiography

##### Topic-1 The Peninsular Block, The Northern And North-Eastern Mountains

Do you know that the Indian plate was to the South of the Equator millions of years ago? Over millions of years, this plate broke into many parts and the Australian plate moved towards the South Eastern direction and the Indian plate to the North. This northward movement of the Indian plate is still continuing and it has significant consequences on the physical environment of the Indian subcontinent. It is primarily through the interplay of these endogenic and exogenic forces and lateral movements of the plates that the present geological structure and geomorphologic processes active in the Indian subcontinent came into existence.

- The Peninsula is formed essentially by a great complex of very ancient gneisses and granites, which constitutes a major part of it. As a part of the Indo-Australian Plate, it has been subjected to various vertical movements and block faulting.





### • The Himalayas and Other Peninsular Mountains:

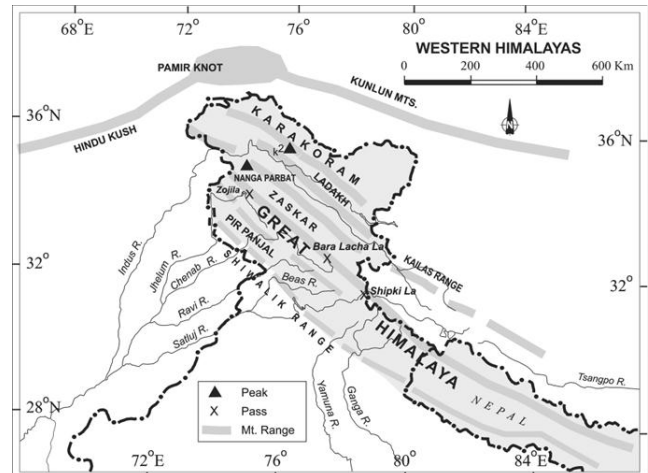
The Himalayas along with other Peninsular mountains are young, weak and flexible in their geological structure unlike the rigid and stable Peninsular Block. These mountains are tectonic in origin, dissected by fast-flowing rivers which are in their youthful stage. Various landforms like gorges, V-shaped valleys, rapids, waterfalls, etc., are indicative of this stage.

• **Indo-Ganga-Brahmaputra Plain:** The third geological division of India comprises the plains formed by the river Indus, the Ganga and the Brahmaputra. Originally, it was a geo-synclinal depression which attained its maximum development during the third phase of the Himalayan mountain formation approximately about 64 million years ago.

• **The North and North eastern Mountains:** The North and North eastern Mountains consist of the Himalayas and the North eastern hills. The Himalayas consist of a series of parallel mountain ranges. Some of the important ranges are the Greater Himalayan range, which includes the Great Himalayas and the Trans Himalayan range, the Middle Himalayas and the Shiwalik. The approximate length of the Great Himalayan range, also known as the central axial range, is 2,500 km from East to West, and their width varies between 160-400 km from North to South. Himalayas are not only the physical barrier, they are also a climatic, drainage and cultural divide. There are large-scale regional variations within the Himalayas. On the basis of relief, alignment of ranges and other geomorphological features, the Himalayas can be divided into the following sub-divisions:

• **Kashmir or Northwestern Himalayas:** It comprises a series of ranges such as the Karakoram, Ladakh, Zaskar and Pir Panjal. The northeastern part of the Kashmir Himalayas is a cold desert, which lies between the Greater Himalayas and the Karakoram ranges. Between the Great Himalayas and the Pir Panjal range, lies the world famous valley of Kashmir and the famous Dal Lake. The Kashmir Himalayas are also famous for Karewa formations, which are useful for the cultivation of Zafran, a local variety of saffron. Some of the

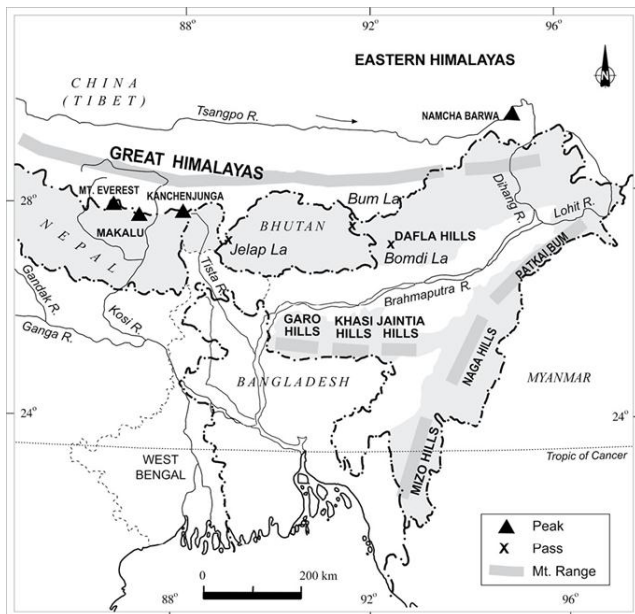
important passes of the region are Zoji La on the Great Himalayas, Banihal on the Pir Panjal, Photu La on the Zaskar and Khardung La on the Ladakh range. Srinagar, capital city of the state of Jammu and Kashmir is located on the banks of Jhelum river. Jhelum in the valley of Kashmir is still in its youth stage and yet forms meanders – a typical feature associated with the mature stage in the evolution of fluvial land form.



• **The Himachal and Uttarakhand Himalayas:** This part lies approximately between the Ravi in the West and the Kali (a tributary of Ghaghara) in the East. It is drained by two major river systems of India, i.e., the Indus and the Ganga. Tributaries of the Indus include the river Ravi, the Beas and the Satluj, and the tributaries of Ganga flowing through this region include the Yamuna and the Ghaghara. The three ranges of Himalayas are prominent in this section also. These are the Great Himalayan range, the Lesser Himalayas (which is locally known as Dhaoladhar in Himachal Pradesh and Nagtibha in Uttaranchal) and the Shiwalik range from the North to the South. The two distinguishing features of this region from the point of view of physiography are the 'Shiwalik' and 'Dun formations'. Dehra Dun is the largest of all the duns with an approximate length of 35-45 km and a width of 22-25 km.

• **The Darjiling and Sikkim Himalayas:** They are flanked by Nepal Himalayas in the west and Bhutan Himalayas in the East. It is relatively small but is a most significant part of the Himalayas. The higher reaches of this region are inhabited by Lepcha tribes while the southern part, particularly the Darjiling Himalayas, has a mixed population of Nepalis, Bengalis and tribals from Central India. As compared to the other sections of the Himalayas, these along with the Arunachal Himalayas are conspicuous by the absence of the Shiwalik formations.

• **The Arunachal Himalayas:** These extend from the east of the Bhutan Himalayas up to the Diphu pass in the East. The general direction of the mountain range is from South West to North East. Some of the important mountain peaks of the region are Kangtu and Namcha Barwa. Bhramaputra flows through a deep gorge after crossing Namcha Barwa. An important aspect of the Arunachal Himalayas is the numerous ethnic tribal community inhabiting in these areas. Some of the prominent ones from west to east are the Monpa, Daffla, Abor, Mishmi, Nishi and the Nagas. Most of these communities practise Jhumming. It is also known as shifting or slash and burn cultivation. Due to rugged terrain inter-valley transportation linkages are nominal. Hence, most of the interactions are carried through the duar region along the Arunachal-Assam border.



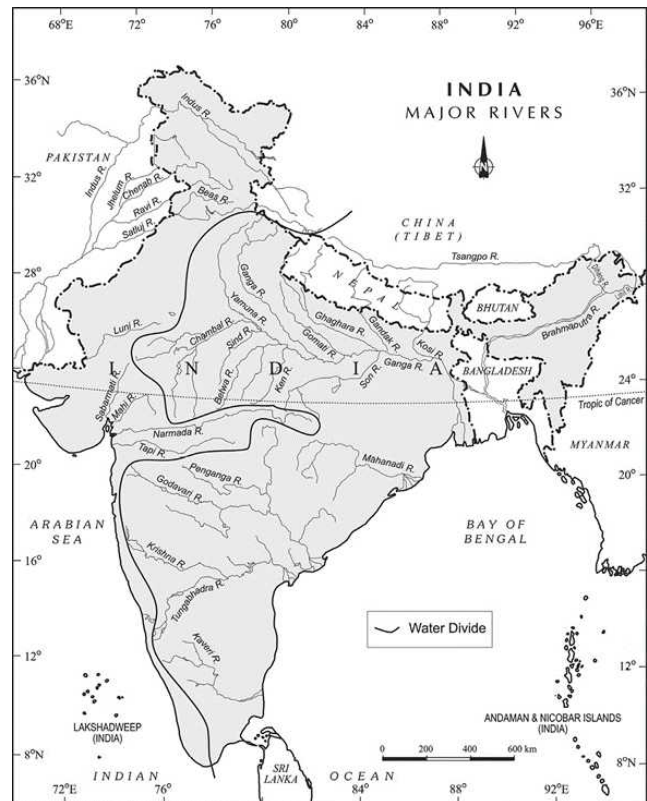
• **The Eastern Hills and Mountains:** These are part of the Himalayan mountain system having their general alignment from the north to the south direction. They are known by different local names. In the north, they are known as Patkai Bum, Naga hills, the Manipur hills and in the south as Mizo or Lushai hills. The Barak is an important river in Manipur and Mizoram. The physiography of Manipur is unique by the presence of a large lake known as 'Loktak' lake at the centre, surrounded by mountains from all sides. Mizoram which is also known as the 'Molassis basin' which is made up of soft unconsolidated deposits. Most of the rivers in Nagaland form the tributary of the Brahmaputra. While two rivers of Mizoram and Manipur are the tributaries of the Barak river, which in turn is the tributary of Meghna; the rivers in the eastern part of Manipur are the tributaries of Chindwin, which in turn is a tributary of the Irrawady of Myanmar.

## Chapter 3 Drainage System

### Topic-1 The Himalayan Drainage System: Evolution Of The Himalayan Drainage System, The River Systems Of The Himalayan Drainage System

The flow of water through well-defined channels is known as 'drainage' and the network of such channels is called a 'drainage system'. The drainage pattern of an area is the outcome of the geological time period, nature and structure of rocks, topography, slope, amount of water flowing and the periodicity of the flow.

• A river drains the water collected from a specific area, which is called its 'catchment area'. An area drained by a river and its tributaries is called a drainage basin. The boundary line separating one drainage basin from the other is known as the watershed. The catchments of large rivers are called river basins while those of small rivulets and rills are often referred to as watersheds.



• Indian Drainage System may be divided on various bases. On the basis of discharge of water (orientations to the sea), it may be grouped into: (i) the Arabian Sea Drainage; and (ii) the Bay of Bengal Drainage. Nearly 77 per cent of the drainage area consisting of the Ganga, the Brahmaputra, the Mahanadi, the Krishna, etc., is oriented towards the Bay of Bengal while 23 per cent comprising the Indus, the Narmada, the Tapi, the Mahi and the Periyar systems discharge their waters in the Arabian Sea.

• On the basis of the size of the watershed, the drainage basins of India are grouped into three categories: (i) Major river basins with more than 20,000 sq. km of catchment area. (ii) Medium river basins with catchment area between 2,000-20,000 sq. km. • On the basis of the mode of origin, nature and characteristics, the Indian drainage may also be classified into the Himalayan drainage and the Peninsular drainage.

• **The Himalayan Drainage:** The Himalayan drainage system has evolved through a long geological history. It mainly includes the Ganga, the Indus and the Brahmaputra river basins. Since these are fed both by melting of snow and precipitation, rivers of this system are perennial.

• These rivers pass through the giant gorges carved out by the erosional activity carried on simultaneously with the uplift of the Himalayas.

• In the Himalayan reaches, the course of these rivers is highly tortuous, but over the plains they display a strong meandering tendency and shift their courses frequently.

• River Kosi, also known as the 'sorrow of Bihar', has been notorious for frequently changing its course.

• There are differences of opinion about the evolution of the Himalayan rivers. However, geologists believe that a mighty river called Shiwalik or Indo-Brahma traversed the entire longitudinal extent of the Himalaya from Assam to Punjab and onwards to Sind, and finally discharged into the Gulf of Sind near lower Punjab during the Miocene period some 5-24 million years ago.

• It is opined that in due course of time Indo-Brahma river was dismembered into three main drainage



systems: (i) the Indus and its five tributaries in the western part; (ii) the Ganga and its Himalayan tributaries in the central part; and (iii) the stretch of the Brahmaputra in Assam and its Himalayan tributaries in the eastern part.

- The Himalayan drainage consists of several river systems but the following are the major river systems:
- **The Indus System:** It is one of the largest river basins of the world, covering an area of 11,65,000 sq. km (in India it is 321, 289 sq. km and a total length of 2,880 km (in India 1,114 km). It originates from a glacier near Bokhar Chu (31°15' N latitude and 81°40' E longitude) in the Tibetan region at an altitude of 4,164 m in the Kailash Mountain range.
- The Indus receives a number of Himalayan tributaries such as the Shyok, the Gilgit, the Zaskar, the Hunza, the Nubra, the Shigar, the Gasting and the Dras.
- The other important tributaries joining the right bank of the Indus are the Khurram, the Tochi, the Gomai, the Viboa and the Sangar. They all originate in the Sulaiman ranges. The river flows southward and receives 'Panjnad' a little above Mithankot. The Panjnad is the name given to the five rivers of Punjab, namely the Satluj, the Beas, the Ravi, the Chenab and the Jhelum.
- The Indus flows in India only through the Leh district in Jammu and Kashmir.
- The Jhelum, an important tributary of the Indus, rises from a spring at Verinag situated at the foot of the Pir Panjal in the south-eastern part of the valley of Kashmir.
- The Chenab is the largest tributary of the Indus. It is formed by two streams, the Chandra and the Bhaga, which join at Tandi near Keylong in Himachal Pradesh.
- The Ravi is another important tributary of the Indus. It rises west of the Rohtang Pass in the Kullu hills of Himachal Pradesh and flows through the Chamba Valley of the state.
- The Beas is another important tributary of the Indus, originating from the Beas Kund near the Rohtang Pass at an elevation of 4,000 m above the mean sea level.
- The Satluj originates in the Rakas lake near Mansarovar at an altitude of 4,555 m in Tibet where it is known as Langchen Khambab.
- **The Ganga System:** The Ganga is the most important river of India both from the point of view of its basin and cultural significance. The Ganga basin covers about 8.6 lakh sq. km area in India alone. The Ganga river system is the largest in India having a number of perennial and non-perennial rivers originating in the Himalayas in the north and the Peninsula in the south, respectively.
- The Yamuna, the western most and the longest tributary of the Ganga, has its source in the Yamunotri Glacier on the western slopes of Banderpunch range (6,316 km).
- The Chambal rises near Mhow in the Malwa Plateau of Madhya Pradesh and flows northwards through a gorge up wards of Kota in Rajasthan, where the Gandhisagar Dam has been constructed.
- The Gandak comprises two streams, namely Kaligandak and Trishulganga. It rises in the Nepal Himalayas between the Dhaulagiri and Mount Everest and drains the central part of Nepal.
- The Ghaghara originates in the glaciers of Mapchachungo. After collecting the waters of its tributaries – Tila, Seti and Beri, it comes out of the mountain, cutting a deep gorge at Shishapani.
- The Kosi is an antecedent river with its source to the north of Mount Everest in Tibet, where its main stream Arun rises.
- The Ramganga is comparatively a small river rising in

the Garhwal Hills near Gairsain.

- The Damodar occupies the eastern margins of the Chotanagpur Plateau where it flows through a rift valley and finally joins the Hugli. The Barakar is its main tributary.
- The Sarda or Saryu river rises in the Milan Glacier in the Nepal Himalayas where it is known as the Goriganga.
- The Mahananda is another important tributary of the Ganga rising in the Darjiling Hill.
- The Son is a large south bank tributary of the Ganga, originating in the Amarkantak Plateau.
- **The Brahmaputra System:** The Brahmaputra, one of the largest rivers of the world, has its origin in the Chemayungdung Glacier of the Kailash range near the Mansarovar Lake.
- The Brahmaputra receives numerous tributaries in its 750 km long journey through the Assam valley.
- The Brahmaputra enters into Bangladesh near Dhubri and flows southward. In Bangladesh, the Tista joins it on its right bank from where the river is known as the Yamuna.

**Important Terms. Dendritic drainage pattern:** The drainage pattern resembling the branches of a tree is known as "dendritic" the examples of which are the rivers of northern plain. **Radial drainage pattern:** When the rivers originate from a hill and flow in all directions, the drainage pattern is known as 'radial'. **Trellis drainage pattern:** When the primary tributaries of rivers flow parallel to each other and secondary tributaries join them at right angles, the pattern is known as 'trellis'. **Centripetal drainage pattern:** When the rivers discharge their waters from all directions in a lake or depression, the pattern is known as 'centripetal'. **Catchment area:** A river drains the water collected from a specific area, which is called its 'catchment area'. **Drainage basin:** An area drained by a river and its tributaries is called a drainage basin. **Watershed:** The boundary line separating one drainage basin from the other is known as the watershed.

## Topic-2 The Peninsular Drainage System: The Evolution Of The Peninsular Drainage System, River Systems Of The Peninsular Drainage, River Regimes.

The Peninsular Drainage System is older than the Himalayan one. The Western Ghats running close to the western coast act as the water divide between the major Peninsular rivers, discharging their water in the Bay of Bengal and as small rivulets joining the Arabian Sea.

- Most of the major Peninsular rivers except Narmada and Tapi flow from west to East. The other major river systems of the Peninsular drainage are – the Mahanadi the Godavari, the Krishna and the Kaveri. Peninsular rivers are characterised by fixed course, absence of meanders and non perennial flow of water.
- Three major geological events in the distant past have shaped the present drainage systems of Peninsular India: Subsidence of the western flank of the Peninsula leading to its submergence below the sea during the early tertiary period. Upheaval of the Himalayas when the northern flank of the Peninsular block was subjected to subsidence and the consequent trough faulting. Slight tilting of the Peninsular block from northwest to the southeastern direction gave orientation to the entire drainage system towards the Bay of Bengal during the same period.
- The Mahanadi rises near Sihawa in Raipur district of Chhattisgarh and runs through Odisha to discharge its water into the Bay of Bengal. It is 851 km long and its catchment area spreads over 1.42 lakh sq.km.
- The Godavari is the largest Peninsular river system. It is also called the Dakshin Ganga. It rises in the Nasik



district of Maharashtra and discharges its water into the Bay of Bengal.

- The Krishna is the second largest eastflowing Peninsular river which rises near Mahabaleshwar in Sahyadri.
- The Kaveri rises in Brahmagiri hills (1,341m) of Kogadu district in Karnataka. Its length is 800 km and it drains an area of 81,155 sq. km.
- The Narmada originates on the western flank of the Amarkantak plateau at a height of about 1,057 m.
- The Tapi is the other important westward flowing river. It originates from Multai in the Betul district of Madhya Pradesh.
- Luni is the largest river system of Rajasthan, west of Aravali. It originates near Pushkar in two branches, i.e. the Saraswati and the Sabarmati, which join with each other at Govindgarh.
- Goa has two important rivers which are Mandovi and Jauri.
- Kerala has a narrow coastline. The longest river of Kerala, Bharathapuzha rises near Annamalai hills. It is also known as Ponnani.
- The Periyar is the second largest river of Kerala.
- The pattern of flow of water in a river channel over a year is known as its regime. The north Indian rivers originating from the Himalayas are perennial as they are fed by glaciers through snow melt and also receive rainfall water during rainy season. The discharge is the volume of water flowing in a river measured over time. It is measured either in cusecs (cubic feet per second) or cumecs (cubic metres per second). The two Peninsular rivers display interesting differences in their regimes compared to the Himalayan rivers.
- The rivers of India carry huge volumes of water per year but it is unevenly distributed both in time and space. There are perennial rivers carrying water throughout the year while the non-perennial rivers have very little water during the dry season.

There are a large number of rivers flowing towards the east along with their tributaries. Can you name some of these rivers? There are small rivers which join the Bay of Bengal, though small, these are important in their own right. The Subarnrekha, the Baitarni, the Brahmani, the Vamsadhara, the Penner, the Palar and the Vaigai are important rivers. Find out these rivers from the atlas.

River	Catchment area sq. km
Subamarekha	19.296
Baitami	12.789
Brahmani	39.033
Penner	55.213
Palar	17.870

## Chapter 4 Climate

### Topic-1 Unity And Diversity In The Monsoon Climate, Factors Determining The Climate Of India

Weather is the momentary state of the atmosphere while climate refers to the average of the weather conditions over a longer period of time. There are variations in weather conditions during different seasons. These changes occur due to the changes in the elements of weather (temperature, pressure, wind direction and velocity, humidity and precipitation, etc.). Weather changes quickly, may be within a day or week but climate changes imperceptibly and may be

noted after 50 years or even more.

- Monsoon connotes the climate associated with seasonal reversal in the direction of winds. India has hot monsoonal climate which is the prevalent climate in south and southeast Asia. The climate of India has many regional variations expressed in the pattern of winds, temperature and rainfall, rhythm of seasons and the degree of wetness or dryness.
- India's climate is controlled by a number of factors which can be broadly divided into two groups —

#### Factors related to location and relief:

• **Latitude:** The Tropic of Cancer passes through the central part of India in east-west direction. Thus, northern part of the India lies in sub-tropical and temperate zone and the part lying south of the Tropic of Cancer falls in the tropical zone. The tropical zone being nearer to the equator, experiences high temperatures throughout the year with small daily and annual range.

• **The Himalayan Mountains:** The lofty Himalayas in the north along with its extensions act as an effective climatic divide. The towering mountain chain provides an invincible shield to protect the subcontinent from the cold northern winds. The Himalayas also trap the monsoon winds, forcing them to shed their moisture within the subcontinent.

• **Distribution of Land and Water:** India is flanked by the Indian Ocean on three sides in the south and girdled by a high and continuous mountain-wall in the north. As compared to the landmass, water heats up or cools down slowly. This differential heating of land and sea creates different air pressure zones in different seasons in and around the Indian subcontinent.

• **Distance from the Sea:** Areas in the interior of India are far away from the moderating influence of the sea. Such areas have extremes of climate. Whereas, the coastal areas hardly have any idea of extremes of temperature and the seasonal rhythm of weather.

• **Altitude:** Temperature decreases with height. Due to thin air, places in the mountains are cooler than places on the plains.

• **Relief:** The physiography or relief of India also affects the temperature, air pressure, direction and speed of wind and the amount and distribution of rainfall.

#### Factors related to air pressure and winds:

• To understand the differences in local climates of India, we need to understand the mechanism of the following three factors:

• Distribution of air pressure and winds on the surface of the earth.

• Upper air circulation caused by factors controlling global weather and the inflow of different air masses and jet streams.

• Inflow of western cyclones generally known as disturbances during the winter season and tropical depressions during the south-west monsoon period into India, creating weather conditions favourable to rainfall. The mechanism of these three factors can be understood with reference to winter and summer seasons of the year separately.

#### Mechanism of weather in the winter season:

• **Surface Pressure and Winds:** In winter months, the weather conditions over India are generally influenced by the distribution of pressure in Central and Western Asia. A high pressure centre in the region lying to the north of the Himalayas develops during winter. This centre of high pressure gives rise to the flow of air at the low level from the north towards the Indian

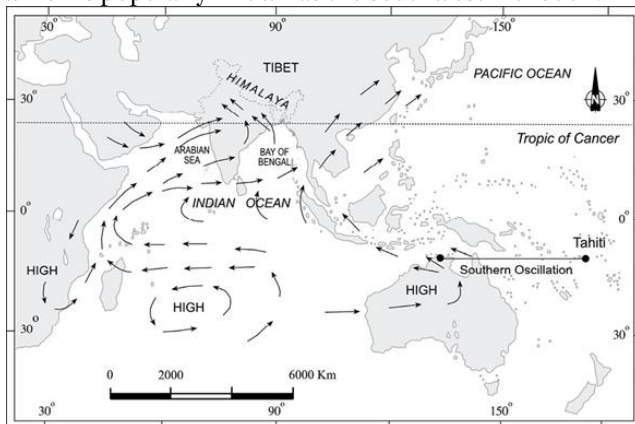
subcontinent, south of the mountain range. The surface winds blowing out of the high pressure centre over Central Asia reach India in the form of a dry continental air mass. These continental winds come in contact with trade winds over northwestern India. The position of this contact zone is not, however, stable.

• **Jet Stream and Upper Air Circulation:** In the lower troposphere about 3 km above the surface of the earth, a different pattern of air circulation is observed. All of Western and Central Asia remains under the influence of westerly winds along the altitude of 9-13 km from West to East. These winds blow across the Asian continent at latitudes north of the Himalayas roughly parallel to the Tibetan highlands. These are known as jet streams.

• **Western Cyclonic Disturbance and Tropical Cyclones:** The western cyclonic disturbances originate over the Mediterranean Sea and are brought into India by the westerly jet stream. An increase in the prevailing night temperature generally indicates an advance in the arrival of these cyclones disturbances. Most of these cyclones are very destructive due to high wind velocity and torrential rain that accompanies.

#### Mechanism of Weather in the Summer Season:

• **Surface Pressure and Winds:** By the middle of July, the low pressure belt nearer the surface [termed as Inter Tropical Convergence Zone (ITCZ)] shifts northwards, roughly parallel to the Himalayas between 20° N and 25° N. By this time, the westerly jet stream withdraws from the Indian region. The maritime tropical airmass (mT) from the Southern Hemisphere, after crossing the Equator, rushes to the low pressure area in the general southwesterly direction. It is this moist air current which is popularly known as the southwest monsoon.



• **Jet Streams and Upper Air Circulation:** An easterly jet stream flows over the southern part of the Peninsula in June, and has a maximum speed of 90 km per hour. In August, it is confined to 15°N latitude, and in September up to 22°N latitudes. The easterlies normally do not extend to the north of 30°N latitude in the upper atmosphere.

• **Easterly Jet Stream and Tropical Cyclones:** The easterly jet stream steers the tropical depressions into India. These depressions play a significant role in the distribution of monsoon rainfall over the Indian subcontinent. The frequency at which these depressions visit India, their direction and intensity, all go a long way in determining the rainfall pattern during the southwest monsoon period.

**Important Terms Weather:** Weather is the momentary state of the atmosphere. **Climate:** Climate refers to the average of the weather conditions over a longer period of time. **Jet Streams:** Winds blow across the Asian continent at latitudes north of the Himalayas roughly parallel to the Tibetan highlands are known as jet streams. **ITCZ:** The Inter Tropical

Convergence Zone (ITCZ) is a low pressure zone located at the Equator where trade winds converge, and so, it is a zone where air tends to ascend. **Monsoon Trough:** In July, the ITCZ is located around 20° N-25°N latitudes over the Gangetic plain.

## Topic-2 The Nature Of The Indian Monsoon, The Rhythm Of Seasons, Distribution Of Rainfall, Climatic Regions Of India, Monsoon And The Economic Life In India

Systematic studies of the causes of rainfall in the South Asian region help to understand the causes and salient features of the monsoon, particularly some of its important aspects, such as:

• **The onset of the monsoon:** The differential heating of land and sea during the summer months is the mechanism which sets the stage for the monsoon winds to drift towards the subcontinent. During April and May when the sun shines vertically over the Tropic of Cancer, the large landmass in the north of Indian ocean gets intensely heated. This causes the formation of an intense low pressure in the northwestern part of the subcontinent. The southwest monsoon sets in over the Kerala coast by 1st June and moves swiftly to reach Mumbai and Kolkata between 10th and 13th June. By mid July, southwest monsoon engulfs the entire subcontinent.

• **Rain bearing Systems and Rainfall Distribution:** There seem to be two rain-bearing systems in India. First originate in the Bay of Bengal causing rainfall over the plains of north India. Second is the Arabian Sea current of the southwest monsoon which brings rain to the west coast of India. The intensity of rainfall over the west coast of India is, however, related to two factors: The offshore meteorological conditions The position of the equatorial jet stream along the eastern coast of Africa The rain which comes in spells, displays a declining trend from west to east over the west coast, and from the southeast towards the northwest over the North Indian Plain and the northern part of the Peninsula.

• **Break in the Monsoon:** During the south-west monsoon period after having rains for a few days, if rain fails to occur for one or more weeks, it is known as break in the monsoon. These dry spells are quite common during the rainy season. These breaks in the different regions are due to different reasons. In northern India rains are likely to fail if the rain-bearing storms are not very frequent along the monsoon trough or the ITCZ over this region. Over the west coast the dry spells are associated with days when winds blow parallel to the coast.

• The meteorologists recognise the following four seasons:

#### The Cold Weather Season:

• **Temperature:** Usually, the cold weather season sets in by mid-November in northern India. December and January are the coldest months in the northern plain. The mean daily temperature remains below 21°C over most parts of northern India. There are three main reasons for the excessive cold in north India during this season: States like Punjab, Haryana and Rajasthan being far away from the moderating influence of sea experience continental climate. The snowfall in the nearby Himalayan ranges creates cold wave situation; and Around February, the cold winds coming from the Caspian Sea and Turkmenistan bring cold wave along with frost and fog over the north-western parts of

India. There is hardly any seasonal change in the distribution pattern of the temperature in coastal areas because of moderating influence of the sea and the proximity to equator.

- **Pressure and Winds:** Due to low pressure gradient, the light winds with a low velocity of about 3-5 km per hour begin to blow outwards. By and large, the topography of the region influences the wind direction. During the winters, the weather in India is pleasant. The pleasant weather conditions, however, at intervals, get disturbed by shallow cyclonic depressions originating over the east Mediterranean Sea and travelling eastwards across West Asia, Iran, Afghanistan and Pakistan before they reach the north western parts of India.

- **Rainfall:** Winter monsoons do not cause rainfall as they move from land to the sea. It is because firstly, they have little humidity; and secondly, due to anti cyclonic circulation on land, the possibility of rainfall from them reduces. During October and November, northeast monsoon while crossing over the Bay of Bengal, picks up moisture and causes torrential rainfall over the Tamil Nadu coast, southern Andhra Pradesh, southeast Karnataka and southeast Kerala.

### The Hot Weather Season:

- **Temperature:** With the apparent northward movement of the sun towards the Tropic of Cancer in March, temperatures start rising in North India. April, May and June are the months of summer in north India. The hot weather season in South India is mild and not so intense as found in North India. Due to altitude, the temperatures in the hills of Western Ghats remain below 25°C. The mean daily minimum temperature during the summer months also remains quite high and rarely goes below 26°C.

- **Pressure and Winds:** The summer months are a period of excessive heat and falling air pressure in the northern half of the country. Because of the heating of the subcontinent, the ITCZ moves northwards occupying a position centred at 25°N in July. In the heart of the ITCZ in the northwest, the dry and hot winds known as 'Loo', blow in the afternoon, and very often, they continue to well into midnight. Dust storms in the evening are very common during May in Punjab, Haryana, Eastern Rajasthan and Uttar Pradesh.

- **The South West Monsoon Season:** The rain in the southwest monsoon season begins rather abruptly. One result of the first rain is that it brings down the temperature substantially. This sudden onset of the moisture-laden wind associated with violent thunder and lightening, is often termed as the "break" or "burst" of the monsoons. The monsoon may burst in the first week of June in the coastal areas of Kerala, Karnataka, Goa and Maharashtra while in the interior parts of the country, it may be delayed to the first week of July.

### • The monsoon approaches the landmass in two branches:

- **The Arabian Sea branch:** The monsoon winds originating over the Arabian Sea further split into three branches: It's one branch is obstructed by the Western Ghats. These winds climb the slopes of the Western Ghats from 900- 1200 m. Soon, they become cool, and as a result, the windward side of the Sahyadris and Western Coastal Plain receive very heavy rainfall ranging between 250 cm and 400 cm. Another branch of the Arabian sea monsoon strikes the coast north of Mumbai. Moving along the Narmada and Tapi river valleys, these winds cause rainfall in extensive areas of central India. A third branch of this monsoon wind

strikes the Saurashtra Peninsula and the Kachchh. It then passes over west Rajasthan and along the Aravallis, causing only scanty rainfall.

- **The Bay of Bengal branch:** The Bay of Bengal branch strikes the coast of Myanmar and part of southeast Bangladesh. But the Arakan Hills along the coast of Myanmar deflect a big portion of this branch towards the Indian subcontinent. The other branch moves up the Brahmaputra Valley in the north and the northeast, causing widespread rains. Its sub-branch strikes the Garo and Khasi hills of Meghalaya. Mawsynram, located on the crest of Khasi hills, receives the highest average annual rainfall in the world.

### Characteristics Of Monsoonal Rainfall

(i) Rainfall received from the southwest monsoons is seasonal in character, which occurs between June and September.

(ii) Monsoonal rainfall is largely governed by relief or topography. For instance the windward side of the Western Ghats register a rainfall of over 250 cm. Again, the heavy rainfall in the north-eastern states can be attributed to their hill ranges and the Eastern Himalayas.

(iii) The monsoon rainfall has a declining trend with increasing distance from the sea. Kolkata receives 119 cm during the southwest monsoon period, Patna 105 cm, Allahabad 76 cm and Delhi 56 cm.

(iv) The monsoon rains occur in wet spells of few days duration at a time. The wet spells are interspersed with rainless interval known as 'breaks'. These breaks in rainfall are related to the cyclonic depressions mainly formed at the head of the Bay of Bengal, and their crossing into the mainland. Besides the frequency and intensity of these depressions, the passage followed by them determines the spatial distribution of rainfall.

(v) The summer rainfall comes in a heavy downpour leading to considerable run off and soil erosion.

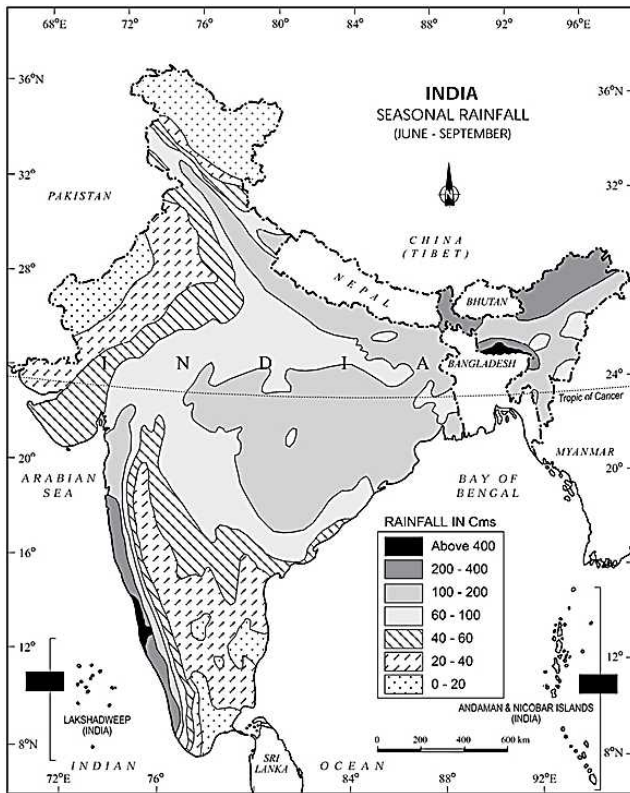
(vi) Monsoons play a pivotal role in the agrarian economy of India because over three-fourths of the total rain in the country is received during the southwest monsoon season.

(vii) Its spatial distribution is also uneven which ranges from 12 cm to more than 250 cm.

(viii) The beginning of the rains sometimes is considerably delayed over the whole or a part of the country.

(ix) The rains sometimes end considerably earlier than usual, causing great damage to standing crops and making the sowing of winter crops difficult.





0: India: Seasonal Rainfall (June-September)

- **Season of Retreating Monsoon:** The months of October and November are known for retreating monsoons. The monsoon retreats from the western Rajasthan by the first week of September. It withdraws from Rajasthan, Gujarat, Western Ganga plain and the Central Highlands by the end of the month. By the beginning of October, the low pressure covers northern parts of the Bay of Bengal and by early November, it moves over Karnataka and Tamil Nadu. By the middle of December, the centre of low pressure is completely removed from the Peninsula.
- The weather in the retreating monsoon is dry in north India but it is associated with rain in the eastern part of the Peninsula. Here, October and November are the rainiest months of the year. The widespread rain in this season is associated with the passage of cyclonic depressions which originate over the Andaman Sea and manage to cross the eastern coast of the southern Peninsula. A bulk of the rainfall of the Coromandal Coast is derived from these depressions and cyclones. Such cyclonic storms are less frequent in the Arabian Sea.

### Variability Of Rainfall

A characteristic feature of rainfall in India is its variability. The variability of rainfall is computed with the help of the following formula:

$$C.V. = \frac{\text{Standard Deviation}}{\text{Mean}} \times 100$$

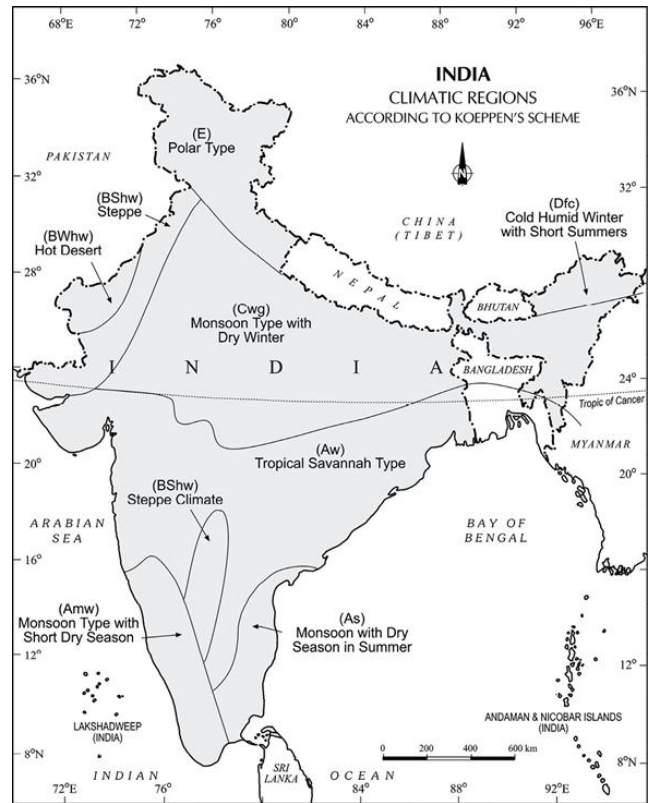
where C.V. is the coefficient of variation.

- The average annual rainfall in India is about 125 cm, but it has great spatial variations. The highest rainfall occurs along the west coast, on the Western Ghats, as well as in the sub-Himalayan areas in the northeast and the hills of Meghalaya. In some parts of Khasi and Jaintia hills, the rainfall exceeds 1,000 cm.
- Rainfall between 100-200 cm is received in the southern parts of Gujarat, east Tamil Nadu, north eastern Peninsula covering Odisha, Jharkhand, Bihar, eastern Madhya Pradesh, northern Ganga plain along the sub-Himalayas and the Cachar Valley and Manipur. Western Uttar Pradesh, Delhi, Haryana, Punjab, Jammu and Kashmir, eastern Rajasthan, Gujarat

and Deccan Plateau receive rainfall between 50-100 cm. Parts of the Peninsula, especially in Andhra Pradesh, Karnataka and Maharashtra, Ladakh and most of western Rajasthan receive rainfall below 50 cm.

- A climatic region has a homogeneous climatic condition which is the result of a combination of factors.
- Temperature and rainfall are two important elements which are considered to be decisive in all the schemes of climatic classification.

**Major climatic types of India based on Koeppen's scheme have been described below:**



Koeppen based his scheme of Climatic classification on monthly values of temperature and precipitation. He identified five major climatic types, namely:

- Tropical climates, where mean monthly temperature throughout the year is over 18°C.
- Dry climates, where precipitation is very low in comparison to temperature, and hence, dry. If dryness is less, it is semi-arid (S); if it is more, the climate is arid (W).
- Warm temperate climates, where mean temperature of the coldest month is between 18°C and minus 3°C.
- Cool temperate climates, where mean temperature of the warmest month is over 10°C, and mean temperature of the coldest month is under minus 3°C.
- Ice climates, where mean temperature of the warmest month is under 10°C.

- Regional variations in monsoon climate help in growing various types of crop.
- Sudden monsoon burst creates problem of soil erosion over large areas in India.
- Besides the natural causes, human activities such as large scale industrialisation and presence of polluting gas in the atmosphere are also important factors responsible for global warming.
- The mean annual surface temperature of the earth in the past 150 years has increased. It is projected that by the year 2,100, global temperature will warm about 2°C.
- According to the current prediction, on an average, the sea level will rise 48 cm by the end of twenty first century.

**El-Nino and the Indian Monsoon**

El-Nino is a complex weather system that appears once every three to seven years, bringing drought, floods and other weather extremes to different parts of the world.

The system involves oceanic and atmospheric phenomena with the appearance of warm currents off the coast of Peru in the Eastern Pacific and affects weather in many places including India. El-Nino is merely an extension of the warm equatorial current which gets replaced temporarily by cold Peruvian current or Humbolt current (locate these currents in your atlas). This current increases the temperature of water on the Peruvian coast by 10°C. This results in:

- the distortion of equatorial atmospheric circulation;
- irregularities in the evaporation of sea water;
- reduction in the amount of planktons which further reduces the number of fish in the sea.

The word El-Nino means 'Child Christ' because this current appears around Christmas in December. December is a summer month in Peru (Southern Hemisphere).

El-Nino is used in India for forecasting long range monsoon rainfall. In 1990-91, there was a wild El-Nino event and the onset of southwest monsoon was delayed over most parts of the country ranging from five to twelve days.

**Important Terms** **Mango Shower:** Towards the end of summer, there are pre-monsoon showers which are a common phenomena in Kerala and coastal areas of Karnataka. Locally, they are known as mango showers since they help in the early ripening of mangoes. **Nor Westers:** These are dreaded evening thunderstorms in Bengal and Assam. Their notorious nature can be understood from the local nomenclature of 'Kalbaisakhi', a calamity of the month of Baisakh. These showers are useful for tea, jute and rice cultivation. In Assam, these storms are known as "Bardoli Chheerha". **Loo:** Hot, dry and oppressing winds blowing in the Northern plains from Punjab to Bihar with higher intensity between Delhi and Patna. **Dust storms:** A strong turbulent wind which carries clouds of fine dust, soil and sand over a large area. **Bardoli Chheerha:** In Assam, North Western storms are known as 'Bardoli Chheerha'. **Bursting of the monsoon:** High velocity winds with extreme thundering and lightening cause sudden rainfall, which is called bursting of the monsoon. **October heat:** Owing to the condition of high temperature and humidity, the weather becomes rather oppressive and this is known as October heat. **Blossom showers:** With this shower, coffee flowers blossom in Kerala and nearby areas.

## Chapter 5

### Natural Vegetation

#### Topic-1 Types Of Forests, Forest Cover In India

Natural vegetation refers to a plant community that has been left undisturbed over a long time, so as to allow its individual species to adjust themselves to climate and soil conditions as fully as possible. India is a land of great variety of natural vegetation. Depending upon the variations in the climate and the soil, the vegetation of India changes from one region to another.

• Indian forests can be divided into the following groups:

(i) Tropical Evergreen and Semi Evergreen forests

(ii) Tropical Deciduous forests

(iii) Tropical Thorn forests

(iv) Montane forests

(v) Littoral and Swamp forests.

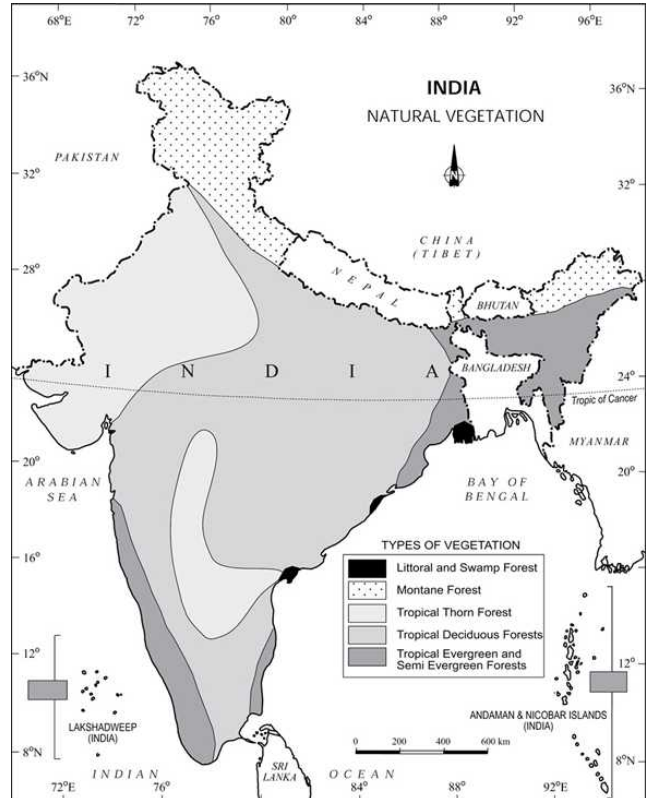
• **Tropical Evergreen and Semi Evergreen Forests:**

These forests are found in the western slope of the Western Ghats, hills of the north eastern region and the Andaman and Nicobar Islands. They are found in warm and humid areas with an annual precipitation of over 200 cm and mean annual temperature above 22°C.

• Tropical evergreen forests are well stratified, with layers closer to the ground and are covered with shrubs and creepers, with short structured trees followed by tall variety of trees.

• The trees reach great heights up to 60 m or above.

- There is no definite time for trees to shed their leaves, flowering and fruition.
- As such these forests appear green all the year round. Species found in these forests include rosewood, mahogany, aini, ebony, etc
- The semi evergreen forests are found in the less rainy parts of these regions.
- The undergrowing climbers provide an evergreen character to these forests. Main species are white cedar, hollock and kail.



• **Tropical Deciduous Forests:** These are the most widespread forests in India. They are also called the monsoon forests.

• They spread over regions which receive rainfall between 70-200 cm.

• **On the basis of the availability of water, these forests are further divided into:**

• **The Moist deciduous forests:** They are more pronounced in the regions which record rainfall between 100-200 cm. Teak, sal, shisham, hurra, mahua, amla, semul, kusum, and sandalwood etc. are the main species of these forests.

• **Dry deciduous forest:** It covers vast areas of the country, where rainfall ranges between 70 -100 cm. Tendu, palas, amaltas, bel, khair, axlewood, etc. are the common trees of these forests.

• **Tropical thorn forests:** It occurs in the areas which receive rainfall less than 50 cm. These consist of a variety of grasses and shrubs. It includes semi-arid areas of south west Punjab, Haryana, Rajasthan, Gujarat, Madhya Pradesh and Uttar Pradesh.

• Important species found are babool, ber, and wild date palm, khair, neem, khejri, palas, etc.

• **Montane Forests:** In mountainous areas, the decrease in temperature with increasing altitude leads to a corresponding change in natural vegetation. Mountain forests can be classified into two types:

• **The northern mountain forests:** Deciduous forests are found in the foothills of the Himalayas. Deodar, a highly valued endemic species grows mainly in the western part of the Himalayan range. The southern slopes of the Himalayas carry a thicker vegetation cover

because of relatively higher precipitation than the drier north-facing slopes.

- **The southern mountain forests:** These forests are found in the Western Ghats, the Vindhyas and the Nilgiris. Some of the other trees of this forest of economic significance include, magnolia, laurel, cinchona and wattle. Such forests are also found in the Satpura and the Maikal ranges.
- **Littoral and Swamp Forests:** India has a rich variety of wetland habitats. About 70 per cent of this comprises areas under paddy cultivation. The total area of wet land is 3.9 million hectares. Crisscrossed by creeks of stagnant water and tidal flows, these forests give shelter to a wide variety of birds. In India, the mangrove forests spread over 6,740 sq. km which is 7 per cent of the world's mangrove forests. They are highly developed in the Andaman and Nicobar Islands and the Sunderbans of West Bengal.
- According to state records, the forest area covers 23.28 per cent of the total land area of the country. The forest area is the area notified and recorded as the forest land irrespective of the existence of trees, while the actual forest cover is the area occupied by forests with canopy.
- In 2011, the actual forest cover was only 21.05 per cent. Of the forest cover, the share of dense and open forests was 12.29 per cent and 8.75 per cent respectively.
- Both forest area and forest cover vary from state to state. Lakshadweep has zero per cent. Andaman and Nicobar Islands have 83.93 percent.
- Most of the states with less than 10 per cent of the forest area lie in the north and north western part of the country. These are Rajasthan, Gujarat, Punjab, Haryana and Delhi.
- States with 10-20 per cent forest area are Tamil Nadu and West Bengal. In Peninsular India, excluding Tamil Nadu, Dadra and Nagar Haveli and Goa, the area under forest cover is 20-30 per cent.
- There is a lot of variation in actual forest cover, which ranges from 9.56 per cent in Jammu and Kashmir to 84.01 per cent in Andaman and Nicobar Islands.

**Important Terms** **Natural vegetation:** It refers to a plant community that has been left undisturbed over a long time, so as to allow its individual species to adjust themselves to climate and soil conditions as fully as possible. **Planted vegetation:** It refers to planting of trees under human supervision. **Tropical evergreen forests:** They occur in areas receiving more than 200 cm of rainfall and having a temperature of 15 to 30 degree Celsius. **Tropical Deciduous forests:** In these types of forests biome is dominated by deciduous trees which lose their leaves seasonally. **Tropical thorn forests:** They are found in semi-arid area with seasonal rainfall averaging 250 to 500 millimetres. **Montane forest:** These forests are found in the mountains. **Littoral and swamp forest:** They are forests which are inundated with freshwater, either permanently or seasonally. **Forest Area:** The forest area is the area notified and recorded as the forest land irrespective of the existence of trees. **Forest cover:** The forest cover is the area occupied by forests with canopy.

## Topic-2 Forest Conservation, Social Forestry, Farm Forestry, Wildlife Conservation In India, Biosphere Reserves.

Forests have an intricate interrelationship with life and environment. These provide numerous direct and indirect advantages to our economy and society. Hence, conservation of forest is of vital importance to the survival and prosperity of humankind.

- Accordingly, the Government of India proposed to have a nation-wide forest conservation policy, and adopted a forest policy in 1952, which was further

modified in 1988.

- The forest policy aimed at:
- Bringing 33 per cent of the geographical areas under forest cover;
- Maintaining environmental stability and to restore forests where ecological balance was disturbed;
- Conserving the natural heritage of the country, its biological diversity and genetic pool;
- Checks soil erosion, extension of the desert lands and reduction of floods and droughts;
- Increasing the forest cover through social forestry and afforestation on degraded land;
- Increasing the productivity of forests to make timber, fuel, fodder and food available to rural population dependant on forests, and encourage the substitution of wood;
- Creating of a massive peoples movement involving women to encourage planting of trees, stop felling of trees and thus, reduce pressure on the existing forest.
- Forest and tribals are very closely related. The age-old knowledge of tribals regarding forestry can be used in the development of forests. Rather than treating tribals as minor forest produce collectors they should be made growers of minor forest produce and encouraged to participate in conservation.
- Social forestry means the management and protection of forests and afforestation on barren lands with the purpose of helping in the environmental, social and rural development.
- The National Commission on Agriculture (1976) has classified social forestry into three categories:
- **Urban forestry:** It pertains to the raising and management of trees on public and privately owned lands in and around urban centres such as green belts, parks, roadside avenues, industrial and commercial green belts, etc.
- **Rural forestry:** It lays emphasis on promotion of agro-forestry and community-forestry.
- **Agro-forestry:** It is the raising of trees and agriculture crops on the same land inclusive of the waste patches. It combines forestry with agriculture, thus, altering the simultaneous production of food, fodder, fuel, timber and fruit.
- Community forestry involves the raising of trees on public or community land such as the village pasture and temple land, roadside, canal bank, strips along railway lines, and schools etc. Community forestry programme aims at providing benefits to the community as a whole.
- Forest departments of various states distribute seedlings of trees free of cost to small and medium farmers. Several lands such as the margins of agricultural fields, grasslands and pastures, land around homes and cow sheds may be used for raising trees under non-commercial farm forestry.
- Wildlife of India is a great natural heritage. It is estimated that about 4-5 per cent of all known plant and animal species on the earth are found in India.
- Over the years, their habitat has been disturbed by human activities and as a result, their numbers have dwindled significantly. There are certain species that are at the brink of extinction.
- Some of the important reasons of the declining of wildlife are as follows:
- Industrial and technological advancement brought about a rapid increase in the exploitation of forest resources.
- More and more lands were cleared for agriculture, human settlement, roads, mining, reservoirs, etc.
- Pressure on forests mounted due to lopping for fodder



and fuelwood and removal of small timber by the local people.

- Grazing by domestic cattle caused an adverse effect on wildlife and its habitat.

- Hunting was taken up as a sport by the elite and hundreds of wild animals were killed in a single hunt. Now commercial poaching is rampant.

- Incidence of forest fire.

- In 1972, comprehensive Wildlife Act was enacted, which provides the main legal framework for conservation and protection of wildlife in India.

- The two main objectives of the Act are; to provide protection to the endangered species listed in the schedule of the Act and to provide legal support to the conservation areas of the country classified as National parks, sanctuaries and closed areas.

- There are 103 National parks and 535 wildlife sanctuaries covering an area of 15.67 million hectares in the country.

- For the purpose of effective conservation of flora and fauna, special steps have been initiated by the Government of India in collaboration with UNESCO's 'Man and Biosphere Programme'.

- Special schemes like Project Tiger (1973) and Project Elephant (1992) have been launched to conserve these species and their habitat in a sustainable manner.

- Initially, the Project Tiger was launched in nine tiger reserves, covering an area of 16,339 sq. km, which has now increased to 44 tiger reserves, encompassing 36,988.28sq. km of tiger habitats distributed in 17 states. The tiger population in the country has registered an increase from 1,411 in 2006 to 1,706 in 2010.

- Project Elephant was launched in 1992 to assist states having free ranging population of wild elephants.

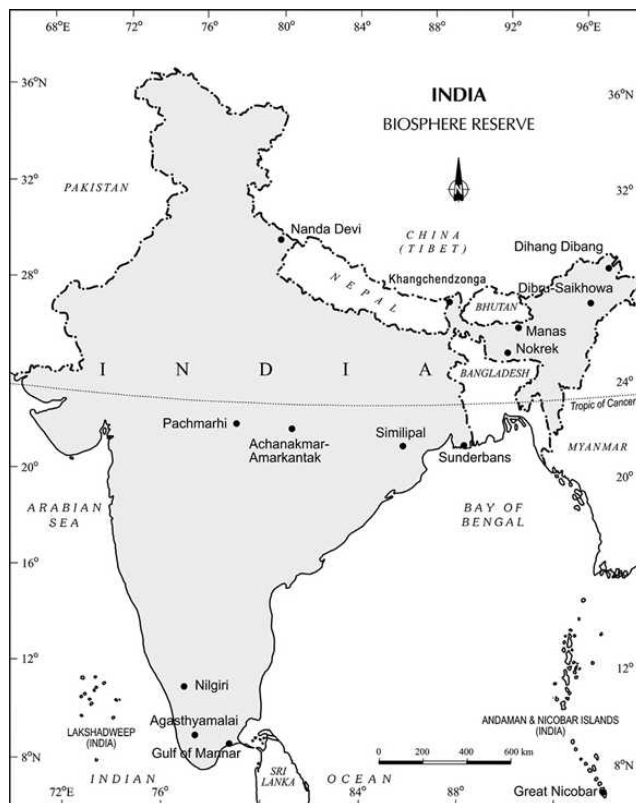
- Apart from this, some other projects such as Crocodile Breeding Project, Project Hangul and conservation of Himalayan Musk deer have also been launched by the Government of India.

- A **Biosphere Reserve** is a unique and representative ecosystem of terrestrial and coastal areas which are internationally recognised within the framework of UNESCO's Man and Biosphere (MAB)

Programme. There are 18 Biosphere Reserves, in India. Ten Biosphere Reserves have been recognized by UNESCO on World Network of Biosphere Reserves.

- **Nilgiri Biosphere Reserve:** The Nilgiri Biosphere Reserve (NBR), the first of the fourteen biosphere reserves of India, was established in September 1986. The Nilgiri Biosphere Reserve possesses different habitat types, unspoilt areas of natural vegetation types with several dry scrubs, dry and moist deciduous, semievergreen and wet evergreen forests, evergreen sholas, grasslands and swamps. The largest south Indian population of elephant, tiger, gaur, sambar and chital as well as a good number of endemic and endangered plants are also found in this reserve.

- **Nanda Devi Biosphere Reserve:** The Nanda Devi Biosphere Reserve situated in Uttarakhand includes parts of Chamoli, Almora, Pithoragarh and Bageshwar districts. The biosphere reserve has a rich fauna, for example the snow leopard, black bear, brown bear, musk deer, snowcock, golden eagle and black eagle.



- **Sunderbans Biosphere Reserve:** It is located in the swampy delta of the river Ganga in West Bengal. It extends over a vast area of 9,630 sq. km and consists of mangrove forests, swamps and forested islands.

Sunderbans is the home of nearly 200 Royal Bengal tigers. Adapting itself to the saline and fresh water environment, the tigers at the park are good swimmers, and they hunt scarce preys such as chital deer, barking deer, wild pig and even macaques.

- **Gulf of Mannar Biosphere Reserve:** The Gulf of Mannar Biosphere Reserve covers an area of 105,000 hectares on the southeast coast of India. The biosphere reserve comprises 21 islands with estuaries, beaches, forests of the nearshore environment, sea grasses, coral reefs, salt marshes and mangroves.

## Chapter 6 Soils

### Topic-1 Classification Of Soils

- Soil is the most important layer of the earth's crust. It is a valuable resource. The bulk of our food and much of our clothing is derived from land-based crops that grow in the soil.

- The soil on which we depend so much for our day-to-day needs has evolved over thousands of years.

- Soil is the mixture of rock debris and organic materials which develop on the earth's surface. The major factors affecting the formation of soil are relief, parent material, climate, vegetation and other life-forms and time.

- Components of the soil are mineral particles, humus, water and air.

- Some soils are deficient in one or more of these, while there are some others that have varied combinations.

- India has varied relief features, landforms, climatic realms and vegetation types. These have contributed in the development of various types of soils in India.

- **On the basis of genesis, colour, composition and location, the soils of India have been classified into:**

- **Alluvial Soils:** Alluvial soils are widespread in the

Northern Plains and the river valleys. Through a narrow corridor in Rajasthan, they extend into the plains of Gujarat. In the Peninsular region, they are found in deltas of the east coast and in the river valleys.

- The colour of the alluvial soils varies from the light grey to ash grey. Its shades depend on the depth of the deposition, the texture of the materials, and the time taken for attaining maturity. Alluvial soils are intensively cultivated.

- **Black Soil:** Black soil covers most of the Deccan Plateau which includes parts of Maharashtra, Madhya Pradesh, Gujarat, Andhra Pradesh and some parts of Tamil Nadu.

- These soils are also known as the 'Regur Soil' or the 'Black Cotton Soil'.
- The black soils are generally clayey, deep and impermeable. They swell and become sticky when wet and shrink when dried.

- Chemically, the black soils are rich in lime, iron, magnesia and alumina. They also contain potash. But they lack in phosphorous, nitrogen and organic matter.
- The colour of the soil ranges from deep black to grey.

- **Red and Yellow soil:** It develops on crystalline igneous rocks in areas of low rainfall in the eastern and southern part of the Deccan Plateau.

- Yellow and red soils are also found in parts of Odisha and Chhattisgarh and in the southern parts of the middle Ganga plain.

- The fine-grained red and yellow soils are normally fertile, whereas coarse-grained soils found in dry upland areas are poor in fertility.

- They are generally poor in nitrogen, phosphorous and humus.

- **Laterite soil:** The word 'Laterite' has been derived from the Latin word 'Later' which means brick. The laterite soils develop in areas with high temperature and high rainfall.

- These soils are poor in organic matter, nitrogen, phosphate and calcium, while iron oxide and potash are in excess.

- Red laterite soils in Tamil Nadu, Andhra Pradesh and Kerala are more suitable for tree crops like cashewnut.

- Laterite soils are widely cut as bricks for use in house construction.

- The laterite soils are commonly found in Karnataka, Kerala, Tamil Nadu, Madhya Pradesh and the hilly areas of Odisha and Assam.

- **Arid soils:** It ranges from red to brown in colour. In some areas, the salt content is so high that common salt is obtained by evaporating the saline water.

- Lower horizons of the soil are occupied by 'kankar' layers because of the increasing calcium content downwards.

- Arid soils are characteristically developed in western Rajasthan, which exhibit characteristic arid topography. These soils are poor and contain little humus and organic matter.

- **Saline Soils:** They are also known as Usara soils. Saline soils contain a larger proportion of sodium, potassium and magnesium, and thus, they are infertile, and do not support any vegetative growth.

- They have more salts, largely because of dry climate and poor drainage.

- Excessive irrigation with dry climatic conditions promotes capillary action, which results in the deposition of salt on the top layer of the soil.

- They are more widespread in western Gujarat, deltas of the eastern coast and in suburban areas of West Bengal.

- **Peaty Soils:** They are found in the areas of heavy rainfall and high humidity, where there is a good growth of vegetation.

- Organic matter in these soils may go even up to 40-50 per cent.

- This soil is black in colour.

- At many places, they are alkaline also. It occurs widely in the northern part of Bihar, southern part of Uttarakhand and the coastal areas of West Bengal, Odisha and Tamil.

- **Forest soil:** forest soils are formed in the forest areas where sufficient rainfall is available. The soils vary in structure and texture depending on the mountain environment where they are formed.

- They are loamy and silty on valley sides and coarse-grained in the upper slopes.

- The soils found in the lower valleys are fertile.

**Important Terms Soil:** Soil is the mixture of rock debris and organic materials which develop on the earth's surface.

**Horizons:** If we dig a pit on land and look at the soil, we find that it consists of three layers which are called horizons.

**Horizon A':** It is the topmost zone, where organic materials have got incorporated with the mineral matter, nutrients and water, which are necessary for the growth of plants.

**Horizon B':** It is a transition zone between the 'horizon A' and 'horizon C', and contains matter derived from below as well as from above. It has some organic matter in it, although the mineral matter is noticeably weathered. **Horizon C':** It is composed of the loose parent material. This layer is the first stage in the soil formation process and eventually forms the above two layers.

**Soil profile:** The arrangement of layers in the three horizons is known as the soil profile. **Parent rock:** Underneath the three horizons there is the rock which is known as the parent rock or the bedrock. **Khadar:** Khadar is the new alluvium and is deposited by floods annually, which enriches the soil by depositing fine silt. **Bhangar:** It represents a system of older alluvium, deposited away from the flood plains.

## Topic-2 Soil Degradation, Soil Erosion, Soil Conservation

- Like any other organism, they too develop and decay, get degraded, respond to proper treatment if administered in time.

- **Soil degradation** can be defined as the decline in soil fertility, when the nutritional status declines and depth of the soil goes down due to erosion and misuse.

- The degree of soil degradation varies from place to place according to the topography, wind velocity and amount of the rainfall.

- The destruction of the soil cover is described as soil erosion. The soil forming processes and the erosional processes of running water and wind go on simultaneously.

- Human activities too are responsible for soil erosion to a great extent.

- Forest and other natural vegetation is removed for human settlement, for cultivation, for grazing animals and for various other needs.

- Wind and water are powerful agents of soil erosion because of their ability to remove soil and transport it. Wind erosion is significant in arid and semi-arid regions. In regions with heavy rainfall and steep slopes, erosion by running water is more significant.

- Sheet erosion takes place on level lands after a heavy shower and the soil removal is not easily noticeable.

- Gully erosion is common on steep slopes. Gullies deepen with rainfall, cut the agricultural lands into small fragments and make them unfit for cultivation.

- A region with a large number of deep gullies or ravines is called a badland topography.

- Besides this, they are also found in Tamil Nadu and West Bengal. The country is losing about 8,000 hectares

of land to ravines every year.

- Soil erosion is a serious problem for Indian agriculture and its negative effects are seen in other spheres also.
- Eroded materials are carried down to rivers and they lower down their carrying capacity, and cause frequent floods and damage to agricultural lands.
- Deforestation is one of the major causes of soil erosion. Plants keep soils bound in locks of roots, and thus, prevent erosion.
- Chemical fertilisers in the absence of organic manures are also harmful to the soil. Unless the soil gets enough humus, chemicals harden it and reduce its fertility in the long run.
- According to estimates, about half of the total land of India is under some degree of degradation.
- If soil erosion and exhaustion are caused by humans; by corollary, they can also be prevented by humans.
- Soil conservation is a methodology to maintain soil fertility, prevent soil erosion and exhaustion, and improve the degraded condition of the soil.
- The first step in any rational solution is to check open cultivable lands on slopes from farming.
- Lands with a slope gradient of 15 - 25 per cent should not be used for cultivation.
- Over-grazing and shifting cultivation in many parts of India have affected the natural cover of land and given rise to extensive erosion.
- Contour terracing, regulated forestry, controlled grazing, cover cropping, mixed farming and crop rotation are some of the remedial measures which are often adopted to reduce soil erosion.
- Efforts should be made to prevent gully erosion and control their formation. Finger gullies can be eliminated by terracing.
- Special attention should be made to control headward extension of gullies. This can be done by gully plugging, terracing or by planting cover vegetation.
- Lands not suitable for cultivation should be converted into pastures for grazing. Experiments have been made to stabilise sand dunes in western Rajasthan by the Central Arid Zone Research Institute (CAZRI).
- The Central Soil Conservation Board, set up by the Government of India, has prepared a number of plans for soil conservation in different parts of the country.
- Integrated land use planning, therefore, seems to be the best technique for proper soil conservation.
- The final responsibility for achieving the conservation of land will rest on the people who operate on it and receive the benefits.

## Chapter 7 Natural Hazards And Disasters

### Topic-1 Classification Of Natural Disasters

- Change is the law of nature. It is a continuous process that goes on uninterruptedly involving phenomena, big and small, material and nonmaterial that make our physical and sociocultural environment.
- Change can be a gradual or slow process like the evolution of landforms and organisms and it can be as sudden and swift as volcanic eruptions, tsunamis, earthquakes and lightening, etc.
- Disasters in general and natural disasters in particular, are some such changes that are always disliked and feared by humankind.
- "Disaster is an undesirable occurrence resulting from forces that are largely outside human control, strikes

quickly with little or no warning, which causes or threatens serious disruption of life and property including death and injury to a large number of people, and requires therefore, mobilisation of efforts in excess of that which are normally provided by statutory emergency services."

- For a long time, geographical literature viewed disasters as a consequence of natural forces; and human beings were treated as innocent and helpless victims in front of the mighty forces of nature.
- Disasters are also caused by some human activities. There are some activities carried by human beings that are directly responsible for disasters.
- Bhopal Gas tragedy, Chernobyl Nuclear Disaster, wars, release of CFCs (Chlorofluorocarbons) and increase of green house gases, environmental pollutions like noise, air, water and soil are some of the disasters which are caused directly by human actions.
- Landslides and floods due to deforestation, unscientific land use and construction activities in fragile areas are some of the disasters that are the results of indirect human actions.
- Natural Hazards are elements of circumstances in the Natural environment that have the potential to cause harm to people or property or both.
- These may be swift or permanent aspects of the respective environmental settings like currents in the oceans, steep slope and unstable structural features in the Himalayas or extreme climatic conditions in deserts or glaciated areas.
- As compared to natural hazards, natural disasters are relatively sudden and cause large scale, widespread death, loss of property and disturbance to social systems and life over which people have a little or no control.
- Every disaster is unique in terms of the local socio-environmental factors that control it, the social response it generates, and the way each social group negotiates with it.
- Natural disasters have caused widespread loss of life and property. Concerted efforts are on at various levels to take appropriate measures to deal with the situation. It is also being felt that the damages caused by natural disasters have global repercussions that are beyond the means and capabilities of individual nation-states to cope up with.
- Identification and classification of disasters is being considered as an effective and scientific step to deal promptly and efficiently with the disasters.
- India is one of those countries which has experienced most of the natural disasters.
- Every year it loses thousands of lives and property worth millions of rupees due to these natural calamities.

### Topic-2 Natural Disasters And Hazards In India, Disaster Management

- Let us focus on the major natural disasters in India.
- **Earthquakes:** Earthquakes are by far the most unpredictable and highly destructive of all the natural disasters. Earthquakes that are of tectonic origin have proved to be the most devastating and their area of influence is also quite large.
- These earthquakes result from a series of earth movements brought about by a sudden release of energy during the tectonic activities in the earth's crust.
- Some of the most vulnerable states are Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Sikkim, and the Darjeeling and subdivision of West Bengal and all the seven states of the northeast.
- Earth scientists have found it difficult to explain the



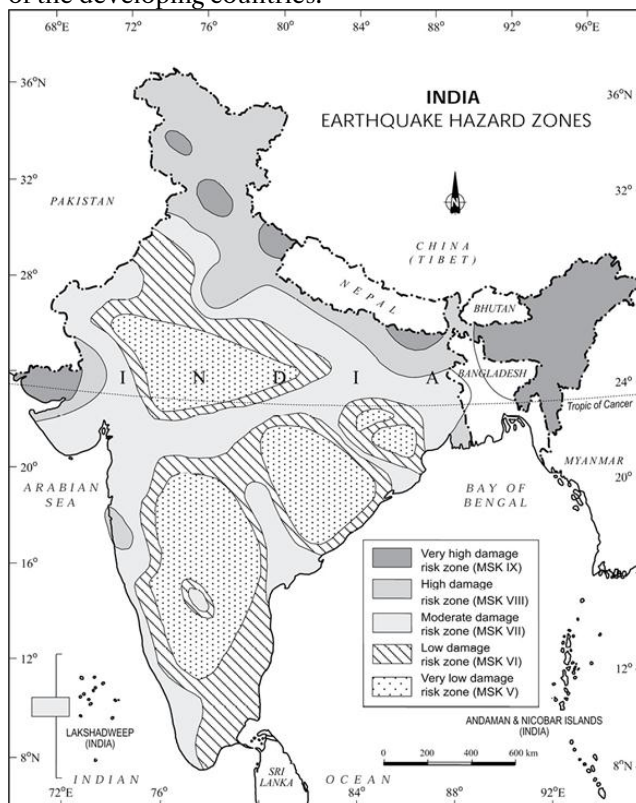
occurrence of earthquakes in one of the oldest, most stable and mature landmass of Peninsular block for a long time.

- National Institute of Disaster Management, have made an intensive analysis of more than 1,200 earthquakes that have occurred in India in different years in the past, and based on these, they divided India into the following five earthquake zones:

- Very high damage risk
- High damage risk zone
- Moderate damage risk zone
- Low damage risk zone
- Very low damage risk zone
- Out of these, the first two zones had experienced some of the most devastating earthquakes in India.

#### • **Socio-Environmental Consequences of Earthquakes:**

- It becomes a calamity when it strikes the areas of high density of population. It not only damages and destroys the settlements, infrastructure, transport and communication network, industries and other developmental activities but also robs the population of their material and socio-cultural gains that they have preserved over generations.
- It renders them homeless, which puts an extra-pressure and stress, particularly on the weak economy of the developing countries.



#### • **Effects of Earthquakes:**

- Surface seismic waves produce fissures on the upper layers of the earth's crust through which water and other volatile materials gush out, inundating the neighbouring areas.
- Earthquakes are also responsible for landslides and often these cause obstructions in the flow of rivers and channels resulting in the formation of reservoirs.
- Sometimes, rivers also change their course causing floods and other calamities in the affected areas.

#### • **Earthquake Hazard Mitigation:**

- The next best option is to emphasis on disaster preparedness and mitigation rather than curative measures such as:
- Establishing earthquake monitoring centres

(seismological centres) for regular monitoring and fast dissemination of information among the people in the vulnerable areas.

- Use of Geographical Positioning System (GPS) can be of great help in monitoring the movement of tectonic plates.

- Preparing a vulnerability map of the country and dissemination of vulnerability risk information among the people and educating them about the ways and means minimising the adverse impacts of disasters.

- Modifying the house types and building designs in the vulnerable areas.

- Finally, making it mandatory to adopt earthquake-resistant designs and use light materials in major construction activities in the vulnerable areas.

- **Tsunami:** Earthquakes and volcanic eruptions that cause the sea-floor to move abruptly resulting in sudden displacement of ocean water in the form of high vertical waves are called tsunamis (harbour waves) or seismic sea waves.

- As a result of this, the impact of tsunami is less over the ocean and more near the coast where they cause largescale devastations.

- Therefore, a ship at sea is not much affected by tsunami and it is difficult to detect a tsunami in the deeper parts of sea.

- Tsunamis are frequently observed along the Pacific ring of fire, particularly along the coast of Alaska, Japan, Philippines, and other islands of Southeast Asia, Indonesia, Malaysia, Myanmar, Sri Lanka, and India etc.

- After reaching the coast, the tsunami waves release enormous energy stored in them and water flows turbulently onto the land destroying port-cities and towns, structures, buildings and other settlements.

- Unlike other natural hazards, the mitigation of hazards created by tsunami is difficult, mainly because of the fact that losses are on a much larger scale.

- **Tropical cyclones:** These are intense low-pressure areas confined to the area lying between 30° N and 30° S latitudes, in the atmosphere around which high velocity winds blow. Horizontally, it extends up to 500-1,000 km and vertically from surface to 12-14 km. A tropical cyclone or hurricane is like a heat engine that is energised by the release of latent heat on account of the condensation of moisture that the wind gathers after moving over the oceans and seas.

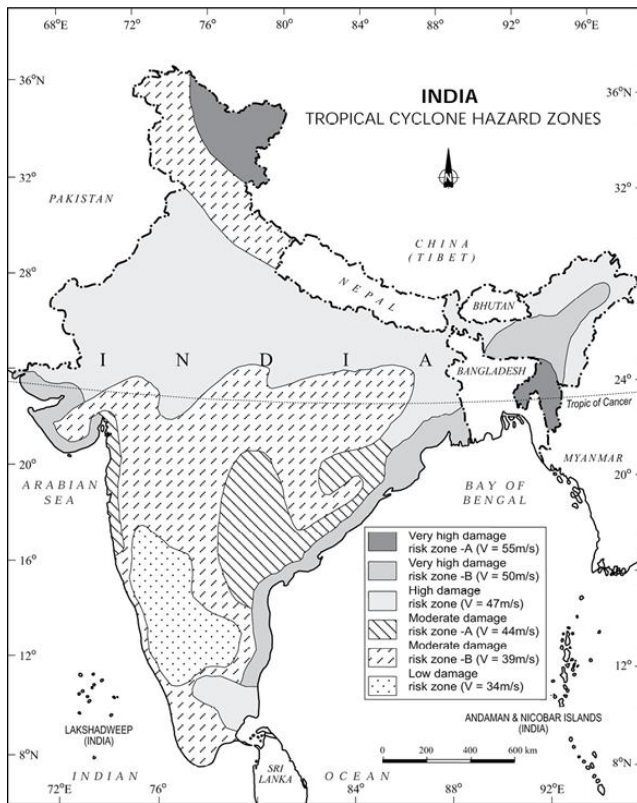
- Some initial conditions for the emergence of a tropical cyclone are:

- Large and continuous supply of warm and moist air that can release enormous latent heat.

- Strong Coriolis force that can prevent filling of low pressure at the centre (absence of Coriolis force near the equator prohibits the formation of tropical cyclone between 0°-5° latitude).

- Unstable condition through the troposphere that creates local disturbances around which a cyclone develops.

- Finally, absence of strong vertical wind wedge, which disturbs the vertical transport of latent heat.



### • Structure of Tropical Cyclone:

- The centre of the cyclone is mostly a warm and low-pressure, cloudless core known as eye of the storm.
- Normally, it varies between 14-17mb/100 km, but sometimes it can be as high as 60mb/100km. Expansion of the wind belt is about 10-150 km from the centre.

### • Spatio-temporal Distribution of Tropical Cyclone in India:

- Though most of the cyclones originate between 10°-15° north latitudes during the monsoon season, yet in case of the Bay of Bengal, cyclones mostly develop during the months of October and November. Here, They originate between 16° - 20° N Latitudes and to the west of 92° E.

### • Consequences of Tropical Cyclones:

- With the increase in distance from the sea, the force of the cyclone decreases.
- In India, the force of the cyclone decreases with increase in distance from the Bay of Bengal and the Arabian Sea.
- So, the coastal areas are often struck by severe cyclonic storms with an average velocity of 180 km/h. Often, this results in abnormal rise in the sea level known as Storm Surge.

- **Floods:** Floods are relatively slow in occurrences and often, occur in well-identified regions and within expected time in a year.

- Floods occur commonly when water in the form of surface run-off exceeds the carrying capacity of the river channels and streams and flows into the neighbouring low-lying flood plains.
- Floods can also be caused due to a storm surge (in the coastal areas), high intensity rainfall for a considerably longer time period, melting of ice and snow, reduction in the infiltration rate and presence of eroded material in the water due to higher rate of soil erosion.
- Floods in the South, Southeast and East Asian countries, particularly in China, India and Bangladesh, are frequent and equally disastrous.
- It has been noticed that states like Rajasthan, Gujarat, Haryana and Punjab are also getting inundated in recent decades due to flash floods.

- Sometimes, Tamil Nadu experiences flooding during November -January due to the retreating monsoon.

### • Consequence and Control of Floods:

- Floods do not only destroy valuable crops every year but these also damage physical infrastructure such as roads, rails, bridges and human settlements.
- Millions of people are rendered homeless and are also washed down along with their cattle in the floods.
- Spread of diseases like cholera, gastro-enteritis, hepatitis and other water-borne diseases spread in the floodaffected areas.
- However, floods also make a few positive contributions. Every year, floods deposit fertile silt over agricultural fields which is good for the crops.
- **Droughts:** The term 'drought' is applied to an extended period when there is a shortage of water availability due to inadequate precipitation, excessive rate of evaporation and over-utilisation of water from the reservoirs and other storages, including the ground water.
- Drought is a complex phenomenon as it involves elements of meteorology like precipitation, evaporation, evapotranspiration, ground water, soil moisture, storage and surface run-off, agricultural practices, particularly the types of crops grown, socio-economic practices and ecological conditions.

### • Types of Droughts:

- **Meteorological Drought:** It is a situation when there is a prolonged period of inadequate rainfall marked with mal-distribution of the same over time and space.

- **Agricultural Drought:** It is also known as soil moisture drought, characterised by low soil moisture that is necessary to support the crops, thereby resulting in crop failures.

- **Hydrological Drought:** It results when the availability of water in different storages and reservoirs like aquifers, lakes, reservoirs, etc.

- **Ecological Drought:** When the productivity of a natural ecosystem fails due to shortage of water and as a consequence of ecological distress, damages are induced in the ecosystem.

### • Drought Prone Areas in India:

- Droughts and floods are the two accompanying features of Indian climate.
- About 30 per cent of the country's total area is identified as drought prone affecting around 50 million people.
- Drought is mainly because of the large-scale variations and unpredictability in the behaviour of the monsoon in India.

- Thus, droughts are widespread and common phenomena in most parts of the country, but these are most recurrent and severe in some and not so in others.

### • Consequences of Drought:

- Crop failure leading to scarcity of food grains (akal), fodder (trikal), inadequate rainfall, resulting in shortage of water (jalkal), and often shortage in all the three (trikal) is most devastating.
- Large-scale death of cattle and other animals, migration of humans and livestock are the most common sight to be seen in the drought-affected areas.
- Scarcity of water compels people to consume contaminated water resulting in spread of many waterborne diseases like gastro-enteritis, cholera, hepatitis, etc.
- Droughts have both immediate as well as long-term disastrous consequences on the social and physical environments.
- **Landslides:** Disasters due to landslides, are in general,

far less dramatic than due to earthquakes, volcanic eruptions, tsunamis and cyclones but their impact on the natural environment and national economy is in no way less severe.

- Landslides are largely controlled by highly localised factors.
- Frequency and certain causal relationships with the controlling factors like geology, geomorphic agents, slope, land-use, vegetation cover and human activities are the major reasons for the landslides to occur.
- **Landslide Vulnerability Zones:**
- **Very High Vulnerability Zone:** Highly unstable, relatively young mountainous areas in the Himalayas and Andaman and Nicobar, high rainfall regions with steep slopes in the Western Ghats and Nilgiris, the northeastern regions.
- **High Vulnerability Zone:** All the Himalayan states and the states from the north-eastern regions except the plains of Assam are included in the high vulnerability zones.
- **Moderate to Low Vulnerability Zone:** Areas that receive less precipitation such as Trans-Himalayan areas of Ladakh and Spiti (Himachal Pradesh), rain shadow areas in the Western and Eastern Ghats and Deccan plateau also experience occasional landslides.
- **Other Areas:** The remaining parts of India, particularly states like Rajasthan, Haryana, Uttar Pradesh, Bihar, West Bengal (except district Darjiling), Assam (except district Karbi Anglong) and Coastal regions of the southern States are safe as far as landslides are concerned.
- **Consequences of Landslides:**
- Landslides have relatively small and localised area of direct influence, but roadblock, destruction of railway lines and channel blocking due to rock-falls have far-

reaching consequences.

- Diversion of river courses due to landslides can also lead to flood and loss of life and property.
- **Mitigation:**
- Restriction on the construction and other developmental activities such as roads and dams, limiting agriculture to valleys and areas with moderate slopes, and control on the development of large settlements in the high vulnerability zones, should be enforced.
- Terrace farming should be encouraged in the north-eastern hill states where Jhumming (Slash and Burn/Shifting Cultivation) is still prevalent.
- Construction of cyclone shelters, embankments, dykes, reservoirs and afforestation to reduce the speed of the winds are some of the steps that can help in minimising the damages.
- **There are three stages involved in disaster mitigation and management:**
- Pre-disaster management involves generating data and information about the disasters, preparing vulnerability zoning maps and spreading awareness among the people about these.
- During disasters, rescue and relief operations such as evacuation, construction of shelters and relief camps, supplying of water, food, clothing and medical aids etc. should be done on an emergency basis.
- Post-disaster operations should involve rehabilitation and recovery of victims.
- Introduction of the Disaster Management Bill, 2005 and establishment of National Institute of Disaster Management are some examples of the positive steps taken by the Government of India.



# NCERT Class12 Fundamentals of Human Geography

## GIST OF NCERT Classwise 30 Books

### Chapter 1

#### Human Geography: Nature And Scope

- This chapter broadly covers and introduces to the nature of geography. As you know geography as a field of study is integrative, empirical, and practical. Thus, the reach of geography is extensive and each and every event or phenomenon which varies over space and time can be studied geographically.
- Physical geography studies physical environment and human geography studies “the relationship between the physical/natural and the human worlds, the spatial distributions of human phenomena and how they come about, the social and economic differences between different parts of the world”.
- Human geography studies the inter-relationship between the physical environment and socio-cultural environment created by human beings through mutual interaction with each other.

#### Human Geography Defined

- “Human geography is the synthetic study of relationship between human societies and earth’s surface” – Ratzel (Synthesis has been emphasised in the above definition)
- “Human geography is the study of “the changing relationship between the unresting man and the unstable earth.” - Ellen C. Semple (Dynamism in the relationship is the keyword in Semple’s definition)
- “Conception resulting from a more synthetic knowledge of the physical laws governing our earth and of the relations between the living beings which inhabit it” - Paul Vidal de la Blache (Human geography offers a new conception of the interrelationships between earth and human beings)
- Human beings interact with their physical environment with the help of technology. Technology indicates the level of cultural development of the society. Human beings were able to develop technology after they developed better understanding of natural laws.
- The knowledge about nature is extremely important to develop technology and technology loosens the shackles of environment on human beings.
- In the early stages of their interaction with their natural environment humans were greatly influenced by it. This type of interaction between primitive human society and strong forces of nature was termed as environmental determinism.
- There is direct dependence of human beings on nature for resources which sustain them. The physical environment for such societies becomes the “Mother Nature”.
- With social and cultural development, humans develop better and more efficient technology. They move from a state of necessity to state of freedom.
- They create possibilities with the resources obtained from the environment. The human activities create cultural landscape. The imprints of human activities are

created everywhere; health resorts on highlands, huge urban sprawls, fields, orchards and pastures in plains and rolling hills, ports on the coasts, oceanic routes on the oceanic surface and satellites in the space. The earlier scholars termed this as possibilism.

- Nature provides opportunities and human beings make use of these and slowly nature gets humanised and starts bearing the imprints of human endeavour.
- A geographer, Griffith Taylor introduced another concept which reflects a middle path (Madhyam Marg) between the two ideas of environmental determinism and possibilism. He termed it as Neodeterminism or stop and go determinism.
- The concept shows that neither is there a situation of absolute necessity (environmental determinism) nor is there a condition of absolute freedom (possibilism). It means that human beings can conquer nature by obeying it. It means that possibilities can be created within the limits which do not damage the environment and there is no free run without accidents.
- The free run which the developed economies attempted to take has already resulted in the greenhouse effect, ozone layer depletion, global warming, receding glaciers and degrading lands.
- The process of adaptation, adjustment with and modification of the environment started with the appearance of human beings over the surface of the earth in different ecological niches. Thus, if we imagine the beginning of human geography with the interaction of environment and human beings, it has its roots deep in history.
- Welfare or humanistic school of thought in human geography was mainly concerned with the different aspects of social well-being of the people.
- Radical school of thought employed Marxian Theory to explain the basic cause of poverty, deprivation and social inequality.
- Behavioural school of thought laid great emphasis on live experience and also on the perception of space by social categories based on ethnicity, race and religion, etc.
- The human geography assumes a highly inter-disciplinary nature. It develops close interface with other sister disciplines in social sciences in order to understand and explain human elements on the surface of the earth.

#### Broad Stages and Thrust of Human Geography

Period	Approaches	Broad Features
Early colonial period	Exploration and description	Imperial and trade interests prompted the discovery and exploration of new areas. An encyclopaedic description of the area formed an important aspect of the geographer’s account.
Later colonial period	Regional analysis	Elaborate description of all aspects of a region were undertaken. The idea was that all the regions were part of a

		whole, i.e. (the earth); so, understanding the parts in totality would lead to an understanding of the whole.
1930s through the inter-War period	Areal differentiation	The focus was on identifying the uniqueness of any region and understanding how and why it was different from others.
Late 1950s to the late 1960s	Spatial organisation	Marked by the use of computers and sophisticated statistical tools. Laws of physics were often applied to map and analyse human phenomena. This phase was called the quantitative revolution. The main objective was to identify mappable patterns for different human activities.
1970s	Emergence of humanistic, radical and behavioural schools	Discontentment with the quantitative revolution and its dehumanised manner of doing geography led to the emergence of three new schools of thought of human geography in the 1970s. Human geography was made more relevant to the socio-political reality by the emergence of these schools of thought. Consult the box below to know a little bit more about these schools of thought.
1990s	Post-modernism in geography	The grand generalisations and the applicability of universal theories to explain the human conditions were questioned. The importance of understanding each local context in its own right was emphasised.

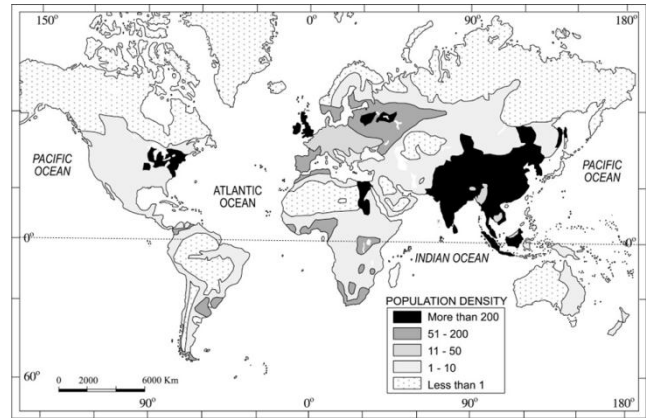
## Chapter 2

### The World Population: Distribution, Density And Growth

#### Topic-1 Pattern of Population Distribution in the World, Density of Population, Factors Influencing Distribution of Population

The world at the beginning of 21<sup>st</sup> century recorded the presence of over six billion population. The population of the world is unevenly distributed. The term population distribution refers to the way people are spaced over the earth's surface. Broadly, 90 per cent of the world population lives in about 10 per cent of its land area.

- The 10 most populous countries of the world contribute about 60 per cent of the world's population. Of these 10 countries, six are located in Asia. Each unit of land has limited capacity to support people living on it. Hence, it is necessary to understand the ratio between the number of people to the size of land.



#### Factors influencing the distribution of population are:

**(a) Geographical Factors:**

- (i) Availability of water:** It is the most important factor for life. So, people prefer to live in areas where fresh water is easily available. It is because of this, river valleys are among the most densely populated areas of the world.
- (ii) Landforms:** People prefer living on flat plains and gentle slopes. This is because such areas are favourable for the production of crops and to build roads and industries. The Ganga Plains are amongst the most densely populated areas of the world while the mountain zones in the Himalayas are scarcely populated.
- (iii) Climate:** An extreme climate such as very hot or cold deserts are uncomfortable for human habitation. Areas with a comfortable climate, where there is not much seasonal variation attract more people. Mediterranean regions were inhabited from early periods in history due to their pleasant climate.
- (iv) Soils:** Fertile soils are important for agricultural and allied activities. Therefore, areas which have fertile loamy soils have more people living on them as these can support intensive agriculture.

**(b) Economic Factors:**

- (i) Minerals:** Areas with mineral deposits attract industries. Mining and industrial activities generate employment. Katanga Zambia copper belt in Africa is one such good example.
- (ii) Urbanisation:** Cities offer better employment opportunities, educational and medical facilities, better means of transport and communication. Mega cities of the world continue to attract large number of migrants every year.
- (iii) Industrialisation:** Industrial belts provide job opportunities and attract large numbers of people. The Kobe- Osaka region of Japan is thickly populated because of the presence of a number of industries.

**(c) Social and Cultural Factors:**

- (i)** Some places attract more people because they have religious or cultural significance. In the same way people tend to move away from places where there is social and political unrest.

#### Topic-2 Population Growth, Components of Population Change

The population growth or population change refers to the change in number of inhabitants of a territory during a specific period of time. Population change in an area is an important indicator of economic development, social upliftment and historical and cultural background of the region.

**Growth of Population:** Change of population in particular area between two points of time is known as growth of population. For example, if we deduct the population of India 1991 (84.63 crore) from population of 2001 (102.70 crore) then we shall get the growth of population (18.07 crores) in actual numbers.

**Growth Rate of Population:** This is the change of population expressed in percentage.

**Natural Growth of Population:** This is the population increased by difference between births and deaths in a particular region between two points of time.

**Natural Growth = Births – Deaths**

**Actual Growth of Population:** This is Births – Deaths + In Migration – Out Migration

**Positive Growth of Population:** This happens when the birth rate is more than the death rate between two points of time or when people from other countries migrate permanently to a region.

**Negative Growth of Population:** If the population decreases between two points of time it is known as negative growth of population. It occurs when the birth rate falls below the death rate or people migrate to other countries.

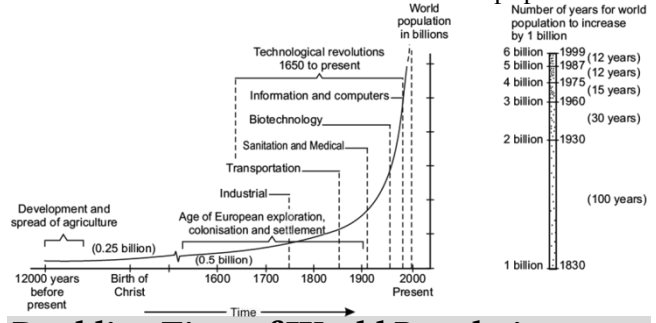
- There are three components of population change – births, deaths and migration.
- The Crude Birth Rate (CBR) is expressed as number of live births in a year per thousand of population in a particular region.
- Death rate plays an active role in population change. Population growth occurs not only by increasing birth rate but also due to decreasing death rate.
- Crude Death Rate is expressed in terms of number of deaths in a particular year per thousand of population in a particular region.
- Apart from birth and death there is another way by which the population size changes. It is called as migration.
- Migration may be permanent, temporary or seasonal. It may take place from rural to rural areas, rural to urban areas, urban to urban areas and urban to rural areas.
- People migrate for a better economic and social life. There are two sets of factors that influence migration: push factor and pull factor.
- The push factors make the place of origin seem less attractive for reasons like unemployment, poor living conditions, political turmoil, unpleasant climate, etc.
- The pull factors make the place of destination seem more attractive than the place of origin for reasons like better job opportunities and living conditions, etc.

### Topic-3 Trends in Population Growth, Doubling Time of World Population, Spatial Pattern of Population Change, Impact of Population Change

The population on the earth is more than six billion. It has grown to this size over centuries. The expanding world trade during the sixteenth and seventeenth century, set the stage for rapid population growth.

- World population exploded in the eighteenth century after the Industrial Revolution. Technological advancement achieved so far helped in the reduction of birth rate and provided a stage for accelerated population growth.
- It took more than a million year for the human population to attain the one billion mark. But it took only 12 years for it to rise from five billion to six billion. This shows that doubling time of world population is reducing fast.
- Most of the population growth is taking place in the developing world where population is exploding. The growth of population is low in developed countries as compared to developing countries.
- A small increase in population is desirable in a growing economy. However, population growth beyond a certain level leads to problems.

- Population decline is also a matter of concern. It indicates that resources that had supported a population earlier are now insufficient to maintain the population.



### Doubling Time of World Population

It took more than a million years for the human population to attain the one billion mark. But it took only 12 years for it to rise from 5 billion to 6 billion.

#### Doubling Time of World Population

Period	Population	Time in which population doubles
10,000 B.C.	5 million	
1650 A.D.	500 million	1,500 years
1850 A.D.	1,000 million	200 years
1930 A.D.	2,000 million	80 years
1975 A.D.	4,000 million	45 years
2012 A.D.	8,000 million	projected figure 37 years

There is a great variation among regions in doubling their population. Most of the population growth is taking place in the developing world, where population is exploding. Why is this so?

#### Population Growth Rates (%) 1995-2000

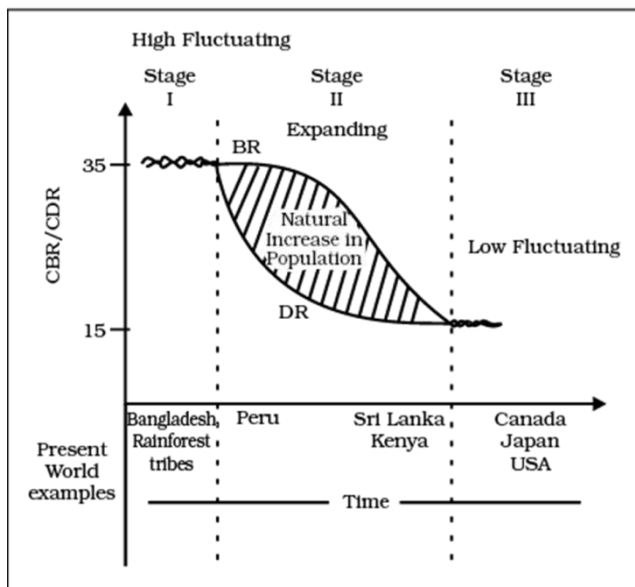
	High		Low
Liberia	8.2	Latvia	-1.5
Somalia	4.2	Estonia	-1.2
Yemen	3.7	Russia, Ukraine	-
			0.6
Saudi Arabia	3.4	Albania, Bulgaria, Croatia, Slovenia, Czech Republic, Germany, Portugal	-0.1
Oman	3.3	Spain, Italy, Denmark	0

### Topic-4 Demographic Transition, Population Control Measures

Demographic Transition Theory can be used to describe and predict the future population of any area. The theory tells us that population of any region changes from high births and high deaths to low births and low deaths as society progresses from rural agrarian and illiterate to urban industrial and literate society.

- The first stage has high fertility and high mortality because people reproduce more to compensate for the deaths due to epidemics and variable food supply.
- Fertility remains high in the beginning of second stage but it declines with time. This is accompanied by reduced mortality rate.
- In the last stage, both fertility and mortality decline considerably. The population is either stable or grows slowly.





- Family planning is spacing or preventing the birth of children. Access to family planning services is a significant factor in limiting population growth and improving women's health.
- The preventive checks are better than the physical checks. For the sustainability of our resources, the world will have to control the rapid population increase.

**Important Terms** **Population distribution:** It refers to the way people are spaced over the earth's surface. **Density of Population:** The ratio between the number of people to the size of land. The number of people living per unit area. The number of people living per sq. km. is called density of population. **Mediterranean regions:** It refers to the region surrounding the Mediterranean Sea. **Loamy soil:** Soil containing sand, silt and clay is defined as loamy soil.

## Chapter 3 Population Composition

### Topic-1 Sex Composition, Age Structure

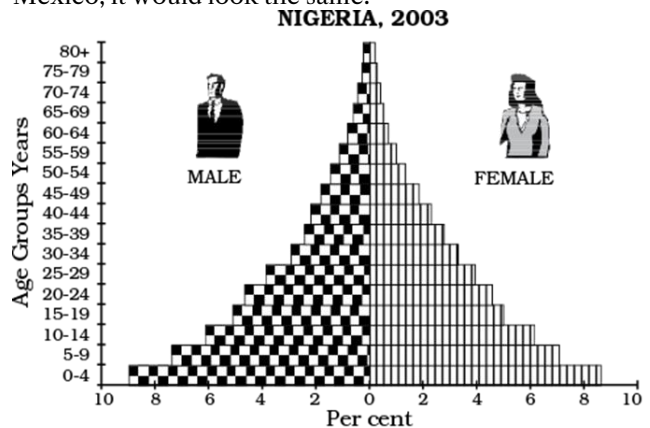
The number of women and men in a country is an important demographic characteristic. The ratio between the number of women and men in the population is called the sex ratio. The sex ratio is an important information about the status of women in a country.

- In regions where gender discrimination is rampant, the sex ratio is bound to be unfavourable towards women. Such areas are those where the practice of female foeticide, female infanticide and domestic violence against women are prevalent.
  - On an average, the world population reflects a sex ratio of 102 males per 100 females.
  - The world pattern of sex ratio does not exhibit variations in the developed regions of the world.
  - In general, Asia has a low sex ratio. Countries like China, India, Saudi Arabia, Pakistan and Afghanistan have a lower sex ratio.
  - Age structure represents the number of people of different age groups. This is an important indicator of population composition, since a large size of population in the age group of 15 to 59 indicates a large working population. The age-sex structure of a population refers to the number of females and males in different age groups. **Age-Sex Pyramid**
- The age-sex structure of a population refers to the number of females and males in different age groups. A population pyramid is used to show the age-sex

structure of the population. The shape of the population pyramid reflects the characteristics of the population. The left side shows the percentage of males while the right side shows the percentage of women in each age group. , 3.2 and 3.3 show different types of population pyramids.

### Expanding Populations

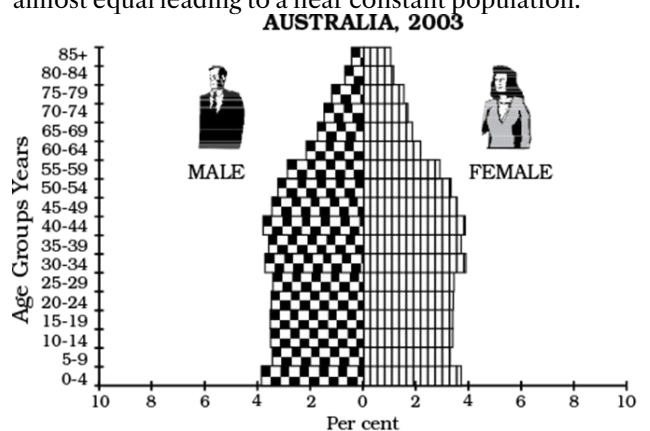
The age-sex pyramid of Nigeria as you can see is a triangular shaped pyramid with a wide base and is typical of less developed countries. These have larger populations in lower age groups due to high birth rates. If you construct the pyramids for Bangladesh and Mexico, it would look the same.



Data source: Demographic Year Book, 2003, United Nations Statistics Division.  
Data refer to national projection  
*Expanding Population*

### Constant Population

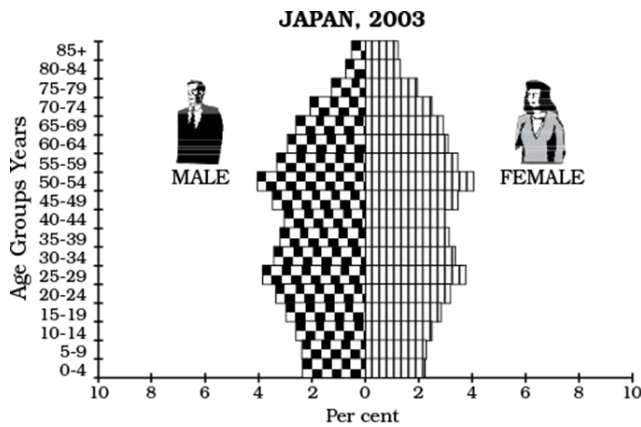
Australia's age-sex pyramid is bell shaped and tapered towards the top. This shows birth and death rates are almost equal leading to a near constant population.



Data source: Demographic Year Book, 2003, United Nations Statistics Division.  
*Constant Population*

### Declining Populations

The Japan pyramid has a narrow base and a tapered top showing low birth and death rates. The population growth in developed countries is usually zero or negative.



Data source: Demographic Year Book, 2003, United Nations Statistics Division.  
Excluding diplomatic personnel outside the country and foreign military and civilian personnel and their dependants stationed in the area

*Declining Population*

### Ageing Population

Population ageing is the process by which the share of the older population becomes proportionally larger. This is a new phenomenon of the twentieth century. In most of the developed countries of the world, population in higher age groups has increased due to increased life expectancy. With a reduction in birth rates, the proportion of children in the population has declined.

### Topic-2 Rural-Urban Composition

The division of population into rural and urban is based on the residence. This division is necessary because rural and urban life styles differ from each other in terms of their livelihood and social conditions.

- The criteria for differentiating rural and urban population varies from country to country. In general terms, rural areas are those where people are engaged in primary activities and urban areas are those where majority of the working population is engaged in non-primary activities.
- In western countries, males outnumber females in rural areas and females outnumber the males in urban areas.
- Farming in these developed countries is also highly mechanised and remains largely a male occupation.
- Shortage of housing, high cost of living, paucity of job opportunities and lack of security in cities, discourage women to migrate from rural to urban areas.
- Proportion of literate population of a country is an indicator of its socio-economic development as it reveals the standard of living, social status of females, availability of educational facilities and policies of government.
- The working population (i.e. women and men of the age group – 15 to 59) take part in various occupations ranging from agriculture, forestry, fishing, manufacturing construction, commercial transport, services, communication and other unclassified services.
- Agriculture, forestry, fishing and mining are classified as primary activities, manufacturing as secondary, transport, communication and other services as tertiary and the jobs related to research and developing ideas as quaternary activities.
- The proportion of working population engaged in these four sectors is a good indicator of the levels of economic development of a nation.

## Chapter 4 Human Development

### Topic-1 Growth and Development

Both growth and development refer to changes over a period of time. The difference is that growth is quantitative and value neutral. It may have a positive or a negative sign.

- Development means a qualitative change which is always value positive. This means that development cannot take place unless there is an increment or addition to the existing conditions. Development occurs when positive growth takes place. Yet, positive growth does not always lead to development. Development occurs when there is a positive change in quality.
- The concept of human development was introduced by Dr. Mahbub-ul-Haq. Dr. Haq has described human development as development that enlarges people's choices and improves their lives.
- The basic goal of development is to create conditions where people can live meaningful lives. Access to resources, health and education are the key areas in human development. Building people's capabilities in the areas of health, education and access to resources is therefore, important in enlarging their choices.

### Topic-2 The Four Pillars of Human Development, Approaches to Human Development

- The human development is supported by the concepts of equity, sustainability, productivity and empowerment.
- Equity refers to making equal access to opportunities available to everybody. The opportunities available to people must be equal irrespective of their gender, race, income and in the Indian case, caste.
- Sustainability means continuity in the availability of opportunities. To have sustainable human development, each generation must have the same opportunities.
- Productivity here means human labour productivity or productivity in terms of human work. Such productivity must be constantly enriched by building capabilities in people. Ultimately, it is people who are the real wealth of nations.
- **There are many ways of looking at the problem of human development:**
  - (i) Income approach:** This is one of the oldest approaches to human development. Human development is seen as being linked to income. Higher the level of income, higher is the level of human development.
  - (ii) Welfare approach:** The approach argues for higher government expenditure on education, health, social security and amenities. People are not participants in development but only passive recipients.
  - (iii) Basic needs approach:** Six basic needs i.e.: health, education, food, water supply, sanitation and housing were identified. Emphasis is paid on providing these basic amenities to everyone.
  - (iv) Capability approach:** Building human capabilities in the areas of health, education and access to resources is the key to increasing human development.

### Topic-3 The Human Development Index (HDI) Ranks the Countries Based on their Performance in the Key Areas of Health, Education and Access to Resources

The human development index (HDI) ranks the countries based on their performance in the key areas of

health, education and access to resources.

- A higher life expectancy means that people have a greater chance of living longer and healthier lives.
- The human development index measures attainments in human development. It reflects what has been achieved in the key areas of human development.
- The human poverty index is related to the human development index. This index measures the shortfall in human development.
- Often the human poverty index is more revealing than the human development index.
- International comparisons of human development are interesting. Often smaller countries have done better than larger ones in human development.
- Countries with very high human development index are those which have a score of over 0.800. Providing education and healthcare is an important government priority here. Countries with higher human development are those where a lot of investment in the social sector has taken place. Many of the countries with a high human development score are located in Europe and represent the industrialised western world.
- Countries with medium levels of human development form the largest group.

### Human Development: Categories, Criteria and Countries<sup>2005</sup>

Level of Human Development	Score in Development Index	Number of Countries
High	above 0.8	57
Medium	between 0.5 upto 0.799	88
Low	below 0.5	32

### Top Ten Countries with High Value Index<sup>2005</sup>

Sl.NO	COUNTRY	Sl.NO	COUNTRY
1.	Norway	6.	Sweden
2.	Iceland	7.	Switzerland
3.	Australia	8.	Ireland
4.	Luxembourg	9.	Belgium
5.	Canada	10.	United States

- A large proportion of these are small countries which have been going through political turmoil and social instability in the form of civil war, famine or a high incidence of diseases.

**Important Terms Development:** Development means a qualitative change which is always value positive. **Growth:** It refers to positive change in size. **Human Development:** Human development refers to the development that enlarges people's choices and improves their lives. **Empowerment:** It means to have the power to make choices and such power comes from increasing freedom and capability. **Equity:** It refers to making equal access to opportunities available to everybody. The opportunities available to people must be equal irrespective of their gender, race, income and in the Indian case, caste.

## Chapter 5 Primary Activities

### Topic-1 Hunting and Gathering, Pastoralism: Nomadic Herding, Commercial Livestock Rearing

- Primary activities are directly dependent on environment as these refer to utilisation of earth's resources such as land, water, vegetation, building materials and minerals.
- It thus, includes, hunting and gathering, pastoral activities, fishing, forestry, agriculture, and mining and quarrying.

- The earliest humans subsisted on: (a) animals which they hunted; and (b) the edible plants which they gathered from forests in the vicinity.
- Primitive societies depended on wild animals. People located in very cold and extremely hot climates survived on hunting.
- The early hunters used primitive tools made of stones, twigs or arrows so the number of animals killed was limited.
- Gathering and hunting are the oldest economic activity known. These are carried out at different levels with different orientations.
- Gathering is practised in regions with harsh climatic conditions. It often involves primitive societies, who extract both plants and animals to satisfy their needs for food, shelter and clothing. The yield per person is very low and little or no surplus is produced.
- Gathering is practised in: (i) high latitude zones which include northern Canada, northern Eurasia and southern Chile; (ii) Low latitude zones such as the Amazon Basin, tropical Africa, Northern fringe of Australia and the interior parts of Southeast Asia.



Areas of Subsistence Gathering

- In modern times some gathering is market-oriented and has become commercial.
- Gatherers collect valuable plants such as leaves, barks of trees and medicinal plants and after simple processing sell the products in the market.
- At some stage in history, human beings might have thought of domestication of animals. People living in different climatic conditions selected and domesticated animals found in those regions.

**Nomadic herding** or pastoral nomadism is a primitive subsistence activity, in which the herders rely on animals for food, clothing, shelter, tools and transport. They move from one place to another, along with their livestock. Each nomadic community occupies a wellidentified territory as a matter of tradition. Movement in search of pastures is undertaken either over vast horizontal distances or vertically from one elevation to another in the mountainous regions.



Areas of Nomadic Herding

- The process of migration from plain areas to pastures on mountains during summers and again from mountain pastures to plain areas during winters is known as transhumance. In mountain regions, such as Himalayas, Gujjars, Bakarwals, Gaddis and Bhotiyas migrate from

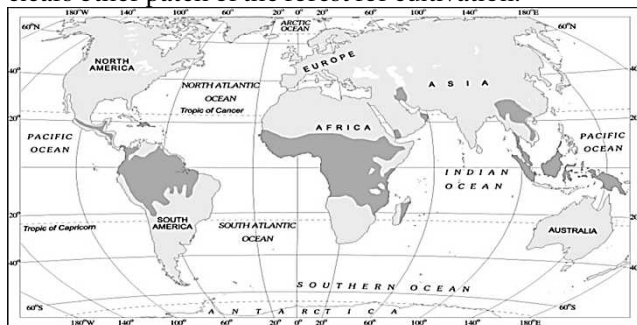


plains to the mountains in summers and to the plains from the high altitude pastures in winters.

- Commercial livestock rearing is more organised and capital intensive.
- Commercial livestock ranching is essentially associated with western cultures and is practised on permanent ranches.
- Products such as meat, wool, hides and skin are processed and packed scientifically and exported to different world markets.
- New Zealand, Australia, Argentina, Uruguay and United States of America are important countries where commercial livestock rearing is practised.

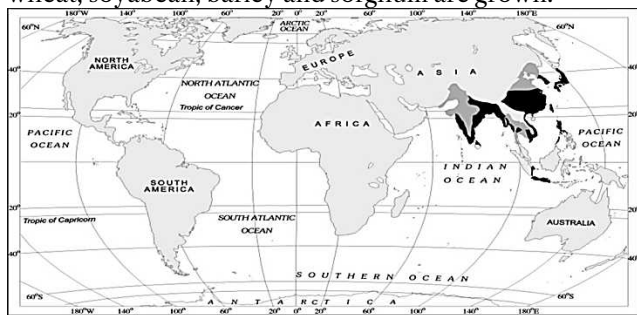
## Topic-2 Agriculture: Different Types of Agricultural Systems

- Agriculture is practised under multiple combinations of physical and socio-economic conditions, which gives rise to different types of agricultural systems.
- Subsistence agriculture is one in which the farming areas consume all, or nearly so, of the products locally grown. It can be grouped in two categories — Primitive Subsistence Agriculture and Intensive Subsistence Agriculture.
- **Primitive Subsistence Agriculture or Shifting Cultivation:** The vegetation is usually cleared by fire, and the ashes add to the fertility of the soil. Shifting cultivation is thus, also called slash and burn agriculture. The cultivation is done with very primitive tools such as sticks and hoes. After sometime (3 to 5 years) the soil loses its fertility and the farmer shifts to other parts and clears other patch of the forest for cultivation.



Areas of Primitive Subsistence Agriculture

- **Intensive Subsistence Agriculture:** There are two types of intensive subsistence agriculture. (i) **Intensive subsistence agriculture dominated by wet paddy cultivation:** It is characterised by dominance of the rice crop. Use of machinery is limited and most of the agricultural operations are done by manual labour. (ii) **Intensive subsistence agriculture dominated by crops other than paddy:** In this type of agriculture, wheat, soyabean, barley and sorghum are grown.

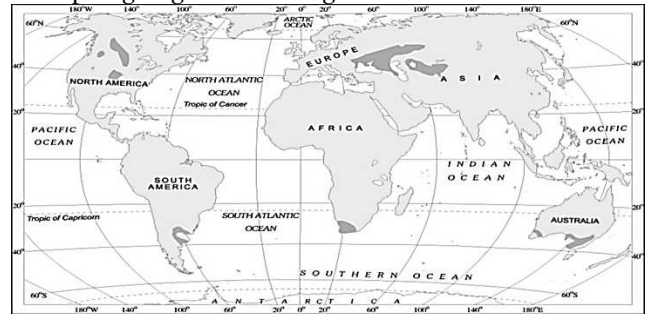


Areas of Intensive Subsistence Farming

- **Plantation Agriculture:** The characteristic features of this type of farming are large estates or plantations, large capital investment, managerial and technical

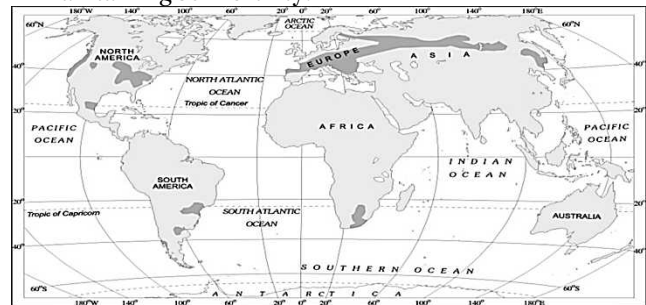
support, scientific methods of cultivation, single crop specialisation, cheap labour, and a good system of transportation which links the estates to the factories and markets for the export of the products.

- **Extensive Commercial Grain Cultivation:** Wheat is the principal crop, though other crops like corn, barley, oats and rye are also grown. The size of the farm is very large, therefore entire operations of cultivation from ploughing to harvesting are mechanised.



2: Areas of Extensive Commercial Grain Farming

- **Mixed Farming:** Mixed farms are moderate in size and usually the crops associated with it are wheat, barley, oats, rye, maize, fodder and root crops. Fodder crops are an important component of mixed farming. Crop rotation and intercropping play an important role in maintaining soil fertility.



4: Areas of Mixed Farming

- **Dairy Farming:** Dairy is the most advanced and efficient type of rearing of milch animals. It is highly capital intensive. Animal sheds, storage facilities for fodder, feeding and milching machines add to the cost of dairy farming. It is highly labour intensive as it involves rigorous care in feeding and milching.



6: Areas of Dairy Farming

- **Mediterranean Agriculture:** It is highly specialised commercial agriculture. It is practised in the countries on either side of the Mediterranean Sea. Viticulture or grape cultivation is a speciality of the Mediterranean region. This region also produces olives and figs. The advantage of Mediterranean agriculture is that more valuable crops such as fruits and vegetables are grown in winters when there is great demand in European and North American markets.

- **Market Gardening and Horticulture:** It specialises in the cultivation of high value crops such as vegetables, fruits and flowers, solely for the urban markets.
- It is both labour and capital intensive and lays

emphasis on the use of irrigation, HYV seeds, fertilisers, insecticides, greenhouses and artificial heating in colder regions.

- The regions where farmers specialise in vegetables only, the farming is known as truck farming. The distance of truck farms from the market is governed by the distance that a truck can cover overnight, hence the name truck farming.
- **Co-operative Farming:** A group of farmers form a co-operative society by pooling in their resources voluntarily for more efficient and profitable farming. Individual farms remain intact and farming is a matter of cooperative initiative.
- **Collective Farming:** It is based on social ownership of the means of production and collective labour. The farmers pool in all their resources like land, livestock and labour. However, they are allowed to retain very small plots to grow crops in order to meet their daily requirements.

### Topic-3 Mining: Factors Affecting Mining Activity, Methods of Mining

- The development of mining began with the Industrial Revolution and its importance is continuously increasing.
- The factors that affect the mining activities are: (i) Physical factors include the size, grade and the mode of occurrence of the deposits. (ii) Economic factors such as the demand for the mineral, technology available and used, capital to develop infrastructure and the labour and transport costs.
- **Mining is of two types:** surface and underground mining.
- The surface mining also known as open-cast mining is the easiest and the cheapest way of mining minerals that occur close to the surface.
- When the ore lies deep below the surface, underground mining method (shaft method) has to be used. It requires specially designed lifts, drills, haulage vehicles, ventilation system for safety and efficient movement of people and material. This method is risky. Poisonous gases, fires, floods and caving in lead to fatal accidents.
- The developed economies are retreating from mining due to high labour cost.
- Several countries of Africa and few of South America and Asia have over 50 per cent of the earnings from minerals alone.

**Important Terms** **Red collar workers:** People engaged in primary activities are called red collar workers. **Primary activity:** Includes the activities of agriculture, mining, forestry farming, grazing, hunting and gathering, fishing and quarrying. **Nomadic herding:** Nomadic herding or pastoral nomadism is a primitive subsistence activity, in which the herders rely on animals for food, clothing, shelter, tools and transport. **Gathering:** To assemble. **Primitive subsistence activity:** Type of agriculture which is done to meet only the farmer's family requirements. **Livestock rearing:** It means domestication of animals to produce commodities such as food, fiber, etc. **Copper Age:** This is the transition age between Neolithic and the Bronze Age. This age is marked by the development and use of copper tools. **Bronze Age:** This age is characterized by the use of bronze tools. **Open cast mining:** It is the kind of mining in which cut is made at the surface of the ground for the purpose of extracting minerals. **Under ground mining:** In this type of mining various underground mining techniques are used to excavate minerals. Know the Facts India is the biggest producer and consumer of dairy products. The average net income for a dairy farmer in USD 387 a cow per year. One of the simplest types of mining is gold panning. The biggest open pit mine in the world is the Bingham Canyon copper pit in Utah.

## Chapter 6 Secondary Activities

### Topic-1 Manufacturing: Characteristics of Modern Large Scale Manufacturing

- Secondary activities add value to natural resources by transforming raw materials into valuable products.
- To add value to raw material it needs to be changed into finished goods. Secondary activities, therefore, are concerned with manufacturing, processing and construction (infrastructure) industries.
- Manufacturing involves application of power, mass production of identical products and specialised labour in factory settings for the production of standardised commodities.
- Manufacturing may be done with modern power and machinery or it may still be very primitive.
- Under the 'Craft Method' factories produce only a few pieces which are made-to-order. So the costs are high. On the other hand, mass production involves production of large quantities of standardised parts by each worker performing only one task repeatedly.
- **Modern manufacturing is characterised by:** (i) a complex machine technology (ii) extreme specialisation and division of labour for producing more goods with less effort, and low costs (iii) vast capital (iv) large organisations (v) executive bureaucracy
- The geographical location of the manufacturing industries should be located at points where the production costs are minimum.
- The existence of a market for manufactured goods is the most important factor in the location of industries.
- The developed regions of Europe, North America, Japan and Australia provide large global markets as the purchasing power of the people is very high.
- Industries based on cheap, bulky and weight-losing material (ores) are located close to the sources of raw material such as steel, sugar, and cement industries.
- Labour supply is an important factor in the location of industries.
- Industries which use more power are located close to the source of the energy supply such as the aluminium industry.
- Speedy and efficient transport facilities to carry raw materials to the factory and to move finished goods to the market are essential for the development of industries.
- Communication is also an important need for industries, for the exchange and management of information.
- Government policies also influence the location of manufacturing industries.
- Many industries benefit from nearness to a leader-industry and other industries. These industries are termed as agglomeration economies.

### Topic-2 Classification of Manufacturing Industries: Manufacturing Industries are Classified on the Basis of their Size, Inputs/Raw Materials, Output/Products and Ownership

- The amount of capital invested, number of workers employed and volume of production determine the size of industry.
- The household/cottage manufacturing unit is the smallest manufacturing unit. The craftsmen or artisans use local raw materials and simple hand tools to produce everyday goods in their homes with the help of their



family members or part-time labour. This type of manufacturing has low commercial significance and most of the tools are devised locally.

- Some common everyday products produced in this sector of manufacturing include foodstuffs, fabrics, mats, containers, tools, furniture, etc.
  - Small scale manufacturing uses local raw material, simple power-driven machines and semi-skilled labour.
  - Large scale manufacturing involves a large market, various raw materials, enormous energy, specialised workers, advanced technology, assembly-line mass production and large capital.
  - Agro-based industries involve the processing of raw materials from the field and farm into finished products for rural and urban markets.
  - Mineral based industries use minerals as a raw material. Some industries use ferrous metallic mineral and some use non-ferrous metallic minerals.
  - Chemical based industries use natural chemical minerals, e.g. mineral-oil (petroleum) is used in petrochemical industry.
  - Chemical industries are also based on raw materials obtained from wood and coal.
  - Forest based raw material using industries use timber for furniture industry, wood, bamboo and grass for paper industry, and lac for lac industries come from forests.
  - Animal based industries use leather for leather industry and wool for woollen textiles are obtained from animals.
  - There are industries which are based on ownership such as the Public sector industries that are owned and managed by governments, Private sector industries that are owned by individual investors, Joint sector industries are managed by joint stock companies or sometimes the private and public sectors together.
  - Traditional large-scale industrial regions are based on heavy industry, often located near coal-fields and engaged in metal smelting, heavy engineering, chemical manufacture or textile production.
- The Ruhr Coal-field, Germany: The Ruhr region is responsible for 80 per cent of Germany's total steel production. Changes in the industrial structure have led to the decay of some areas, and there are problems of industrial waste and pollution. The future prosperity of the Ruhr is based less on the products of coal and steel, for which it was initially famous, and more on the new industries like the huge Opel car assembly plant, new chemical plants, universities. Out-of-town shopping centres have appeared resulting in a 'New Ruhr' landscape
- High technology, or simply high-tech, is the latest generation of manufacturing activities. Robotics on the assembly line, computer-aided design (CAD) and manufacturing, electronic controls of smelting and refining processes, and the constant development of new chemical and pharmaceutical products are notable examples of a high-tech industry. Professionals (white collar) make up a large share of the total workforce.
  - Professionals (white collar) make up a large share of the total workforce. The actual production is done by blue collar workers.
  - The iron and steel industry forms the base of all other industries and, therefore, it is called the basic industry. It may also be called the heavy industry because it uses large quantities of bulky raw materials and its products are also heavy.
  - Cotton textile industry has three sub-sectors *i.e.* handloom, powerloom and mill sectors. Cotton textile

manufacturing requires good quality cotton as raw material. India, China, U.S.A., Pakistan, Uzbekistan, Egypt produce more than half of the world's raw cotton.

## Chapter 7 Tertiary And Quaternary Activities

### Topic-1 Types of Tertiary Activities: Trade and Commerce, Retail Trading Services, Wholesale Trading Services, Transport and Communication Services

- There are many professionals who provide their services against payment of their fee. Thus, all types of services are special skills provided in exchange of payments.
- Health, education, law, governance and recreation, etc., require professional skills. These services require other theoretical knowledge and practical training. Tertiary activities are related to the service sector.
- Manpower is an important component of the service sector as most of the tertiary activities are performed by skilled labour, professionally trained experts and consultants.
- Tertiary activities include both production and exchange. The output is indirectly measured in terms of wages and salaries.
- Tertiary activities, therefore, involve the commercial output of services rather than the production of tangible goods. They are not directly involved in the processing of physical raw materials.
- Thus, trade, transport, communication and services are some of the important tertiary activities.
- Trade is essentially buying and selling of items produced elsewhere. All this work takes place in towns and cities also known as trading centres.
- Trading centres may be divided into rural and urban marketing centres. Rural marketing centres cater to nearby settlements. These are quasi-urban centres. They serve as trading centres of the most rudimentary type.
- Urban marketing centres have more widely specialised urban services. They provide ordinary goods and services as well as many of the specialised goods and services required by people.
- Wholesale trading constitutes bulk business through numerous intermediary merchants and supply houses and not through retail stores.
- Transport is an organised industry created to satisfy man's basic need of mobility. Modern society requires speedy and efficient transport systems to assist in the production, distribution and consumption of goods.
- Communication services involve the transmission of words and messages, facts and ideas.
- Where the transport network is efficient, communications are easily disseminated.
- The use of telecommunications is linked to the development of electrical technology.
- The telegraph, morse code and telex have almost become things of the past.
- Radio, television, pictures, telephone, newspaper and internet have truly revolutionised the global communication system.
- Services are provided to individual consumers who can afford to pay for them.
- Low-order services, such as grocery shops and laundries, are more common and widespread than high-order services or more specialised ones like those of



accountants, consultants and physicians. Personal services are made available to the people to facilitate their work in daily life.

- Tourism has become the world's single largest tertiary activity in total registered jobs (250 million) and total revenue (40 per cent of the total GDP).
- In some regions, tourism is seasonal because the vacation period is dependent on favourable weather conditions, but many regions attract visitors all round the year.
- Tourism fosters the growth of infrastructure industries, retail trading, and craft industries (souvenirs).

### Topic-2 Quaternary Activities, Quinary Activities, Digital Divide

- There are people who work in a segment of the service sector that is knowledge oriented. This sector can be divided into quaternary and quinary activities.
- Quaternary activities centre around research, development and may be seen as an advanced form of services involving specialised knowledge, technical skills and administrative competence.
- Quaternary sector along with the tertiary sector has replaced all primary and secondary employment as the basis for economic growth.
- The highest level of decision makers or policy makers perform quinary activities.
- Quinary activities are services that focus on the creation, re-arrangement and interpretation of new and existing ideas; data interpretation and the use and evaluation of new technologies.
- Often referred to as 'gold collar' professions, they represent another subdivision of the tertiary sector representing special and highly paid skills of senior business executives, government officials, research scientists, financial and legal consultants, etc.
- Outsourcing or contracting out is giving work to an outside agency to improve efficiency and reduce costs.
- When outsourcing involves transferring work to overseas locations, it is described by the term off-shoring.
- Business activities that are outsourced include information technology (IT), human resources, customer support and call centre services and at times also manufacturing and engineering.
- Outsourcing is coming to those countries where cheap and skilled workers are available. These are also outmigrating countries.
- When medical treatment is combined with international tourism activity, it lends itself to what is commonly known as medical tourism.
- Opportunities emerging from the Information and Communication Technology based development is unevenly distributed across the globe.
- While developed countries in general have surged forward, the developing countries have lagged behind and this is known as the digital divide.

**Important Terms** **Tourism:** Tourism is travel undertaken for purposes of recreation rather than business. **Tertiary activities:** Tertiary activities include both production and exchange. **Trade:** It means buying and selling of things. **Economic activities:** Economic activity can be defined as any activity which results in production and distribution of goods and services. **Quaternary activities:** Quaternary activities involve collection, production and dissemination of information or even the production of information. **Quinary activities:** They are services that focus on the creation, re-arrangement and interpretation of new and existing ideas; data interpretation and the use and evaluation of new technologies. **Outsourcing:** Outsourcing or contracting out is giving work to an outside agency to improve efficiency and reduce costs.

**Medical tourism:** When medical treatment is combined with international tourism activity, it lends itself to what is commonly known as medical tourism. **Digital divide:** A digital divide is an economic and social inequality according to categories of persons in a given population for their access to use of, or knowledge of information and communication technologies (ICT).

## Chapter 8 Transport And Communication

### Topic-1 Transport: Mode of Transport

- Transport, communication and trade establish links between producing centres and consuming centres.
- The high living standards and quality of life depend on efficient transportation, communications and trade.
- Transport provides the network of links and carriers through which trade takes place.
- Transport is a service or facility for carrying persons and goods from one place to the other using humans, animals and different kinds of vehicles.
- Roads and railways form part of land transport; while shipping and waterways and airways are the other two modes. Pipelines carry materials like petroleum, natural gas, and ores in liquefied form.
- Every nation has developed various kinds of transportation for defence purposes.
- The principal modes of world transportation are land, water, air and pipelines.
- The significance of a mode depends on the type of goods and services to be transported, costs of transport and the mode available.

### Topic-2 Land Transport, Water Transport, Air Transport, Pipelines

In early days, humans themselves were carriers. With the invention of the wheel, the use of carts and wagons became important. The revolution in transport came about only after the invention of the steam engine in the eighteenth century.

- The invention of the internal combustion engine revolutionised road transport in terms of road quality and vehicles (motor cars and trucks) plying over them.
- Road transport is the most economical for short distances compared to railways.
- The quality of the roads varies greatly between developed and developing countries because road construction and maintenance require heavy expenditure.
- The highest road density and the highest number of vehicles are registered in Asian continent compared to Western Europe.
- Highways are metalled roads connecting distant places. In developed countries, every city and port town is linked through highways.
- Europe has a large number of vehicles and a well-developed highway network.
- Railways are a mode of land transport for bulky goods and passengers over long distances. The railway gauges vary in different countries and are roughly classified as broad (more than 1.5 m), standard (1.44 m), metre gauge (1 m) and smaller gauges.

#### Total Length of Railways in Selected Countries (in 100 sq km)

Sl.NO	Countries	For every 100/km <sup>2</sup> area
1.	U.S.A	278.3
2.	Russia	160.8
3.	India	144.7
4.	Canada	93.5

5.	Germany	90.8
6	China	70.1
7.	Australia	40.0
8.	U.K	37.9
9.	France	34.5
10.	Brazil	30.1

### Trans–Continental Railways

Trans–continental railways run across the continent and link its two ends. They were constructed for economic and political reasons to facilitate long runs in different directions. The following are the most important of these:

#### Trans–Siberian Railway

This is a trans–siberian Railways major rail route of Russia runs from St. Petersburg in the west to Vladivostok on the Pacific Coast in the east passing through Moscow, Ufa, Novosibirsk, Irkutsk, Chita and Khabarovsk. It is the most important route in Asia and the longest (9,332 km) double-tracked and electrified trans– continental railway in the world. It has helped in opening up its Asian region to West European markets. It runs across the Ural Mountains Ob and Yenisei rivers Chita is an important agro–centre and Irkutsk, a fur centre. There are connecting links to the south, namely, to Odessa (Ukraine), Baku on the Caspian Coast, Tashkent (Uzbekistan), Ulan Bator (Mongolia), and Shenyang (Mukden) and Beijing in China.

#### Trans–Canadian Railways

This 7,050 km long rail–line in Canada runs from Halifax in the east to Vancouver on the Pacific Coast passing through Montreal, Ottawa, Winnipeg and Calgary. It was constructed in 1886, initially as part of an agreement to make British Columbia on the west coast join the Federation of States. Later on, it gained economic significance because it connected the Quebec–Montreal Industrial Region with the wheat belt of the Prairie Region and the Coniferous Forest region in the north. Thus each of these regions became complementary to the other. A loop line from Winnipeg to Thunder Bay (Lake Superior) connects this rail–line with one of the important waterways of the world. This line is the economic artery of Canada. Wheat and meat are the important exports on this route.

#### The Union and Pacific Railway

This rail–line connects New York on the Atlantic Coast to San Francisco on the Pacific Coast passing through Cleveland, Chicago, Omaha, Evans, Ogden and Sacramento. The most valuable exports on this route are ores, grain, paper, chemicals and machinery.

#### The Australian Trans–Continental Railway

This rail–line runs west–east across the southern part of the continent from Perth on the west coast, to Sydney on the east coast, passing through Kalgoorlie, Broken Hill and Port Augusta. Another major north–south line connects Adelaide and Alice Spring and to be joined further to the Darwin–Birdum line.

#### The Orient Express

This line runs from Paris to Istanbul passing through Strasbourg, Munich, Vienna, Budapest and Belgrade. The journey time from London to Istanbul by this Express is now reduced to 96 hours as against 10 days by the sea–route. The chief exports on this rail–route are cheese, bacon, oats, wine, fruits, and machinery. There is a proposal to build a Trans–Asiatic Railway linking Istanbul with Bangkok via Iran, Pakistan, India, Bangladesh and Myanmar.

In South America, There is only one trans–continental rail route linking Buenos Aires (Argentina) with Valparaiso (Chile) across the Andes Mountains through the Uspallata Pass located at a height of 3,900 m. In Asia, rail network is the most dense in the thickly populated areas of Japan, China and India. Other countries have relatively few rail routes. West Asia is the least developed in rail facilities because of vast deserts and sparsely populated regions.

Africa continent, despite being the second largest, has only 40,000 km of railways with South Africa alone accounting for 18,000 km due to the concentration of gold, diamond and copper mining activities. The important routes of the continent are

- (i) the Benguela Railway through Angola to Katanga–Zambia Copper Belt;
- (ii) the Tanzania Railway from the Zambian Copper Belt to Dar–es–Salaam on the coast;
- (iii) the Railway through Botswana and Zimbabwe linking the landlocked states to the South African network; and
- (iv) the Blue Train from Cape Town to Pretoria in the Republic of South Africa.

Elsewhere, as in Algeria, Senegal, Nigeria, Kenya and Ethiopia, railway lines connect port cities to interior centres but do not form a good network with other countries.

- One of the great advantages of water transportation is that it does not require route construction.
- Compared to land and air, ocean transport is a cheaper means of haulage (carrying of load) of bulky material over long distances from one continent to another.
- Some of the major ocean routes are The Northern Atlantic Sea Route, The Mediterranean–Indian Ocean Route, The Cape of Good Hope Sea Route, The North Atlantic Sea Route and The South Pacific Sea Route.
- The development of inland waterways is dependent on the navigability, width and depth of the channel, continuity in the water flow and transport technology in use.
- The significance of rivers as inland waterways for domestic and international transport and trade has been recognised throughout the developed world.
- Air transport is the fastest means of transportation, but it is very costly. Being fast, it is preferred by passengers for long–distance travel.
- At present no place in the world is more than 35 hours away. This startling fact has been made possible due to people who build and fly airplanes.
- Today, more than 250 commercial airlines offer regular services to different parts of the world.
- Pipelines are used extensively to transport liquids and gases such as water, petroleum and natural gas for an uninterrupted flow.
- Cooking gas or LPG is supplied through pipelines in many parts of the world. Pipelines can also be used to transport liquefied coal.
- In Europe, Russia, West Asia and India pipelines are used to connect oil wells to refineries, and to ports or domestic markets.

### Topic-3 Communication: Satellite Communication, Cyberspace— Internet

- Human beings have used different methods long–distance communications of which the telegraph and the telephone were important.
- Even today, the telephone is the most commonly used mode. In developing countries, the use of cell phones, made possible by satellites, is important for rural

connectivity.

- Today internet is the largest electronic network on the planet connecting about 1,000 million people in more than 100 countries.
- Artificial satellites now are successfully deployed in the earth's orbit to connect even the remote corners of the globe with limited onsite verification.
- Cyberspace is the world of electronic computerised space. It is encompassed by the Internet such as the World Wide Web (www).
- The speed at which this electronic network has spread is unprecedented in human history.
- As billions use the internet each year, cyberspace will expand the contemporary economic and social space of humans through e-mail, e-commerce, e-learning and e-governance. Internet together with fax, television and radio will be accessible to more and more people cutting across place and time.

**Important Terms** **Metalled roads:** Roads that are made of cement and concrete are known as metalled roads.

**Unmetalled roads:** They are made of mud, sand, etc., and are rough and have dried up tracks. **Road density:** Road density can be defined as the ratio of the length of the country's total road network to the country's land area. **Highways:** Highways are metalled roads connecting distant places. They are constructed for unobstructed vehicular movement. **Border roads:** Roads laid along international boundaries are called border roads. **Passenger liners:** It can be defined as a ship whose primary purpose is to carry passengers from one port to another. **Cargo ships:** It can be defined as ships whose primary purpose is to transport cargo or bulky goods from one place to another. **Big Trunk Route:** It is the busiest sea route in the world and covers almost one fourth of the world's trade.

## Chapter 9 International Trade

### Topic-1 History of International Trade. Why does International Trade Exist?

- Trade means voluntary exchange of goods and services. Two parties are required to trade. One person sells and the other purchases. In certain places, people barter their goods. For both the parties trade is mutually beneficial.
- Trade may be conducted at two levels: international and national.
- The initial form of trade in primitive societies was the barter system, where direct exchange of goods took place.
- In ancient times, transporting goods over long distances was risky, hence trade was restricted to local markets.
- The Silk Route is an early example of long distance trade connecting Rome to China – along the 6,000 km route.
- After the disintegration of the Roman Empire, European commerce grew during twelfth and thirteenth century.
- Fifteenth century onwards, the European colonialism began and along with trade of exotic commodities, a new form of trade emerged which was called slave trade.
- Slave trade was a lucrative business for more than two hundred years till it was abolished in Denmark in 1792, Great Britain in 1807 and United States in 1808.
- After the Industrial Revolution demand for raw materials like grains, meat, wool also expanded.
- The industrialised nations imported primary products as raw materials and exported the value added finished products back to the non-industrialized nations.

- During the World Wars I and II, countries imposed trade taxes and quantitative restrictions for the first time.
- International trade is the result of specialisation in production.
- Each kind of specialisation can give rise to trade. Thus, international trade is based on the principle of comparative advantage, complementarity and transferability of goods and services and in principle, should be mutually beneficial to the trading partners.
- With well-developed transportation and communication systems, no country is willing to forego the benefits derived from participation in international trade.

### Topic-2 Basis of International Trade

- The bases of international trade are as follows:
  - (i) **Difference in national resources:** The resources all over the world are unevenly distributed. (a) **Geological structure:** It determines the mineral resource base and topographical differences ensure diversity of crops and animals raised. (b) **Mineral resources:** They are unevenly distributed the world over. (c) **Climate:** It influences the type of flora and fauna that can survive in a given region.
  - (ii) **Population factors:** The size, distribution and diversity of people between countries affect the type and volume of goods traded. (a) **Cultural factors:** Distinctive forms of art and craft develop in certain cultures which are valued the world over, e.g. China produces the finest porcelains and brocades. (b) **Size of population:** Densely populated countries have large volume of internal trade but little external trade because most of the agricultural and industrial production is consumed in the local markets.
  - (iii) **Stage of economic development:** At different stages of economic development of countries, the nature of items traded undergo changes.
  - (iv) **Extent of foreign investment:** Foreign investment can boost trade in developing countries which lack in capital required for the development of mining, oil drilling, heavy engineering, lumbering and plantation agriculture.
  - (v) With expansions of rail, ocean and air transport, better means of refrigeration and preservation, trade has experienced spatial expansion.

### Topic-3 Important Aspects of International Trade, Types of International Trade, World Trade Organisation, Regional Trade Blocs, Concerns Related to International Trade

- **International trade has three very important aspects:** (a) **Volume of Trade:** The actual tonnage of goods traded makes up the volume. However, services traded cannot be measured in tonnage. Therefore, the total value of goods and services traded is considered to be the volume of trade. (b) **Composition of Trade:** Trade in the service sector is quite different from trade in the products of primary and manufacturing sectors as the services can be expanded infinitely, consumed by many, are weightless and once produced, can be easily replicated and thus, are capable of generating more profit than producing goods. (c) **Direction of Trade:** Historically, the developing countries of the present used to export valuable goods and artefacts, etc., which were exported to European countries. During the nineteenth century, there was a reversal in the direction of trade. European countries started exporting



manufactured goods for exchange of foodstuffs and raw materials from their colonies.

- Balance of trade records the volume of goods and services imported as well as exported by a country to other countries.
- Balance of trade and balance of payments have serious implications for a country's economy. A negative balance would mean that the country spends more on buying goods than it can earn by selling its goods. This would ultimately lead to exhaustion of its financial reserves.
- International trade may be categorised into two types:  
**(a) Bilateral trade:** Bilateral trade is done by two countries with each other. They enter into an agreement to trade specified commodities amongst them.  
**(b) Multilateral trade:** As the term suggests multilateral trade is conducted with many trading countries. The same country can trade with a number of other countries.
- The act of opening up economies for trading is known as free trade or trade liberalisation. This is done by bringing down trade barriers like tariffs.
- Globalization along with free trade can adversely affect the economies of developing countries by not giving equal playing field by imposing conditions which are unfavourable.
- Countries also need to be cautious about dumped goods; as along with free trade dumped goods of cheaper prices can harm the domestic producers.
- WTO is the only international organisation dealing with the global rules of trade between nations.

- WTO also covers trade in services, such as telecommunication and banking, and others issues such as intellectual rights.
- The WTO has however been criticised and opposed by those who are worried about the effects of free trade and economic globalization.
- Regional Trade Blocs have come up in order to encourage trade between countries with geographical proximity, similarity and complementarities in trading items and to curb restrictions on trade of the developing world.
- International trade can prove to be detrimental to nations of it leads to dependence on other countries, uneven levels of development, exploitation, and commercial rivalry leading to wars.
- Global trade affects many aspects of life; it can impact everything from the environment to health and well-being of the people around the world.
- As countries compete to trade more, production and the use of natural resources spiral up, resources get used up faster than they can be replenished.
- As a result, marine life is also depleting fast, forests are being cut down and river basins sold off to private drinking water companies.
- If organisations are geared only towards profit making, and environmental and health concerns are not addressed, then it could lead to serious implications in the future.

### Major Regional Trade

Regional Blocs	Head Quarter	Member Nations	Origin	Commodities	Other Areas of Cooperation
ASEAN (Association of South East Asian Nations)	Jakarta, Indonesia	Brunei, Indonesia, Malaysia, Singapore, Thailand, Vietnam	Aug, 1967	Agro products, rubber, palm oil, rice, copra, coffee, minerals – copper, coal, nickel and tungsten. Energy – petroleum and natural gas and Software products	Accelerate economic growth, cultural development, peace and regional stability
CIS (Commonwealth of Independent States)	Minsk, Belarus	Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.	-----	Crude oil, natural gas, gold, cotton, fibre, aluminium	Integration and cooperation on matters of economics, defence and foreign policy
EU (European Union)	Brussels, Belgium	Austria, Belgium, Denmark, France, Finland, Ireland, Italy, Luxemburg, the Netherlands, Portugal, Spain, Sweden and U.K.	EEC- March 1957 EU - Feb. 1992	Agro products, minerals, chemicals, wood, paper, transport vehicles, optical instruments, clocks - works of art, antiques	Single market with single currency
LAIA (Latin American Integration Association)	Montevideo, Uruguay	Argentina, Bolivia, Brazil, Columbia, Ecuador, Mexico, Paraguay, Peru, Uruguay and Venezuela	1960	-----	-----
NAFTA (North American Free Trade Association)	-----	U.S.A., Canada and Mexico	1994	Agro products, motor vehicles, automotive parts, computers, textiles	-----
OPEC (Organisation of Petroleum Exporting Countries)	Vienna, Austria	Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, U.A.E. and Venezuela	1949	Crude petroleum	Coordinate and unify petroleum policies.
SAFTA (South Asian Free	-----	Bangladesh, Maldives, Bhutan, Nepal, India,	Jan-2006	-----	Reduce tariffs on inter-regional trade

### Topic-4 Gateways of International Trade

- The chief gateways of the world of international trade are the harbours and ports. Cargoes and travellers pass from one part of the world to another through these ports.
- The ports provide facilities of docking, loading, unloading and the storage facilities for cargo. In order to provide these facilities, the port authorities make arrangements for maintaining navigable channels, arranging tugs and barges, and providing labour and managerial services.
- The quantity of cargo handled by a port is an indicator of the level of development of its hinterland.
- **Generally, ports are classified according to the types of traffic which they handle:**
  - (a) **Industrial Ports:** These ports specialise in bulk cargo-like grain, sugar, ore, oil, chemicals and similar materials.
  - (b) **Commercial Ports:** These ports handle general cargo-packaged products and manufactured good. These ports also handle passenger traffic.
  - (c) **Comprehensive Ports:** Such ports handle bulk and general cargo in large volumes.
- **Types of port on the basis of location:**
  - (i) **Inland Ports:** These ports are located away from the sea coast. They are linked to the sea through a river or a canal. Such ports are accessible to flat bottom ships or barges.
  - (ii) **Out Ports:** These are deep water ports built away from the actual ports. These serve the parent ports by receiving those ships which are unable to approach them due to their large size.
- **Types of port on the basis of specialised functions:**
  - (i) **Oil Ports:** These ports deal in the processing and shipping of oil. Some of these are tanker ports and some are refinery ports.
  - (ii) **Ports of Call:** These are the ports which originally developed as calling points on main sea routes where ships used to anchor for refuelling, watering and taking food items.
  - (iii) **Packet Station:** These are also known as ferry ports. These packet stations are exclusively concerned with the transportation of passengers and mail across water bodies covering short distances.
  - (iv) **Entrepot Ports:** These are collection centres where the goods are brought from different countries for export. Singapore is an entrepot for Asia.
  - (v) **Naval Ports:** These are ports which have only strategic importance. These ports serve warships and have repair workshops for them.
- **Important Terms**
  - Volume of trade:** The actual tonnage of goods traded makes up the volume. However, services traded cannot be measured in tonnage. Therefore, the total value of goods and services traded is considered to be the volume of trade.
  - Balance of trade:** It refers to the volume of goods and services imported as well as exported by a country to other countries.
  - Trade liberalisation:** Trade liberalisation is removal or reduction of restriction or barriers on the free exchange of goods between the nations.
  - Free trade:** Free trade is a policy in international markets in which governments do not restrict imports or exports.
  - Bilateral trade:** Bilateral trade is done by two countries with each other.
  - Multilateral trade:** As the term suggests multilateral trade is conducted with many trading countries.
  - Lowlands:** An area where the land is at, near, or below the level of the sea and where there are not usually mountains and large hills.
  - Foreign investment:** It involves capital flow from one country to another, granting extensive ownership stakes in domestic companies and assets.
  - Trade:** It can be defined as the action of buying and selling goods and services.
  - International trade:** It is the exchange of goods and services among countries across national boundaries.
  - Barter system:** It

refers to a system in which direct exchange of goods took place. Money was not involved. **Silk Route:** It was an ancient network of trade routes used from the 2nd century through the 14th century that went from China to the Mediterranean. **Industrial Revolution:** It was a period in which fundamental changes occurred in agriculture, textile, metal industry, etc. **Hinterland:** Hinterland of the port is an area from which products are delivered to a port for shipping. It is the area in land from the port to which imports are distributed and from which exports are collected.

## Chapter 10 Human Settlements

### Topic-1 Classification of Settlements: Rural and Urban Dichotomy. Types and Patterns of Settlements: Rural Settlement Patterns, Problems of Rural Settlement Patterns, Urban Settlement Patterns.

- A human settlement is defined as a place inhabited more or less permanently.
- The study of human settlements is basic to human geography because the form of settlement in any particular region reflects human relationship with the environment.
- Differentiations between rural and urban on the basis of functions are more meaningful even though there is no uniformity in the hierarchy of the functions provided by rural and urban settlements.
- Settlements may also be classified by their shape, patterns types.
  - (i) **Compact or Nucleated Settlements:** Such settlements develop along river valleys and in fertile plains. These settlements are those in which large number of houses are built very close to each other.
  - (ii) **Dispersed Settlements:** In these settlements, houses are spaced far apart and often interspersed with fields.
- Rural settlements are dominated by primary activities such as agriculture, animal husbandry, fishing, etc. The settlements size is relatively small.
- Usually rural settlements are located near water bodies such as rivers, lakes, and springs where water can be easily obtained.
- On the basis of forms or shapes of the settlements, rural settlements can be classified into: Linear, rectangular, circular star like, T-shaped village, double village, cross-shaped village, etc.
- The first urban settlement to reach a population of one million was the city of London.
- In some countries, such as India, the major economic activities in addition to the size of the population in designating a settlement as urban are also taken as a criterion. The administrative setup is a criterion for classifying a settlement as urban in some countries.
- In today's world, modern technology plays a significant role in locating urban settlements. Urban centres which are located close to an important trade route have experienced rapid development.
- Supply of water to rural settlements in developing countries is not adequate. People in villages, particularly in mountainous and arid areas have to walk long distances to fetch drinking water. Water-borne diseases such as cholera and jaundice tend to be a common problem.
- The general absence of toilet and garbage disposal facilities cause health-related problems. During rainy

season, the settlements remain cut off and pose serious difficulties in providing emergency services.

## Topic-2 Classifications of Towns on the Basis of Forms

An urban settlement may be linear, square, star or crescent-shaped. Depending on the size and the services available and functions rendered, urban centres are designated as town, city, million city, conurbation, megalopolis.

### Continent-wise Distribution of Million Cities

Continent	Early 1950	Mid 1970	Mid 2000
Europe	23	30	58
Asia	32	69	206
North & Central America	16	36	79
South America	8	17	43
Africa	3	8	46
Australia	2	2	6
World Total	84	162	438

## Distribution of Mega Cities

A mega city or megalopolis is a general term for cities together with their suburbs with a population of more than 10 million people. New York was the first to attain the status of a mega city by 1950 with a total population of about 12.5 million. The number of mega cities is now 25. The number of mega cities has increased in the developing countries during the last 50 years vis-à-vis the developed countries.

Table 10.3: Mega Cities of the World (as on 01.04. 2012)

Raik	English	Country	Population	Population (million)
1	Tokyo	Japan	34.500.000	34.5
2	Canton	China	25.800.000	25.8
3	Jakarta	Indonesia	25.300.000	25.3
4	Seoul	Korea (South)	25.300.000	25.3
5	Shanghai	China	25.300.000	25.3
6	Mexico City	Mexico	23.200.000	23.2
7	Delhi	India	23.000.000	23.0
8	New York	United States of America	21.500.000	21.5
9	São Paulo	Brazil	21.100.000	21.1
10	Bombay	India	20.800.000	20.8

- The concept of 'town' can best be understood with reference to specific functions such as, manufacturing, retail and wholesale trade, and professional services which exist there.
- A city may be regarded as a leading town, which has out-stripped its local or regional rivals. Cities are much larger than towns and have a greater number of economic functions.
- Conurbation is used to describe a large area of urban development that results from the merging of originally separate towns or cities.

• Megalopolis is referred as the 'super- metropolitan' region extending as union of conurbations.

• The number of million cities in the world has been increasing as never before. The rate of increase in the number of million cities has been three-fold in every three decades – around 160 in 1975 to around 438 in 2005.

## Topic-3 Problems of Human Settlements in Developing Countries

• The settlements in developing countries, suffer from various problems, such as unsustainable concentration of population, congested housing and streets, lack of drinking water facilities.

• They also lack infrastructure such as, electricity, sewage disposal, health and education facilities.

• Shortage of housing, vertical expansion and growth of slums are characteristic features of modern cities of developing countries.

• In most million plus cities in India, one in four inhabitants lives in illegal settlements, which are growing twice as fast as the rest of the cities.

• The enormous migrant population generates a pool of unskilled and semi-skilled labour force, which is already saturated in urban areas.

• Insufficient financial resources fail to create adequate social infrastructure catering to the basic needs of the huge population.

• Lack of employment and education tends to aggravate the crime rates. Male selective migration to the urban areas distorts the sex-ratio in these cities.

• In many cities of the developing countries an improper sewerage system creates unhealthy conditions. Massive use of traditional fuel in the domestic as well as the industrial sector severely pollutes the air.

• Huge concrete structures erected to accommodate the population and economic play a very conducive role to create heat islands.

• It is urgent to eradicate rural poverty and to improve the quality of living conditions, as well as to create employment and educational opportunities in rural settlements.

**Important Terms Human Settlement:** A human settlement is defined as a place inhabited more or less permanently. **Sub-**

**urbanisation:** It is a new trend of people moving away from congested urban areas to cleaner areas outside the city in search of a better quality of living. **Compact or Nucleated**

**Settlements:** These settlements are those in which large number of houses are built very close to each other.

**Dispersed Settlements:** In these settlements, houses are spaced far apart and often interspersed with fields.

**Congested:** It means over-crowded or over-loaded. **Sewage System:** It refers to the facility consisting of a system of sewers for carrying off liquid and solid sewage. **Inhabitants:**

People who live and occupy a certain place. **Migrant:** A person who moves from one place to another in order to find work or better living conditions. **Industrial waste:** It refers to the waste material produced by the industrial processes or activity.



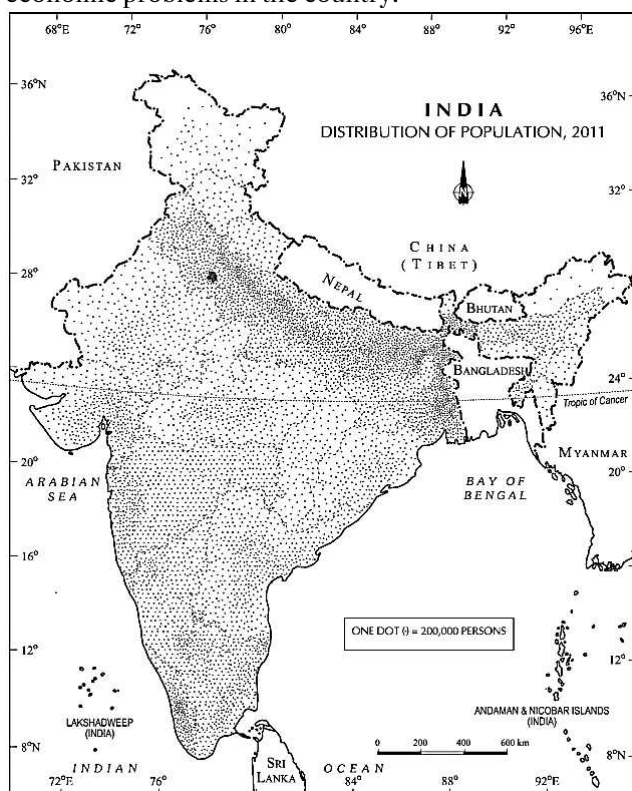
# NCERT Class12 India Human Geography

## GIST OF NCERT Classwise 30 Books

### Chapter 1 Population: Distribution, Density, Growth And Composition

#### Topic-1 Distribution of Population: The Uneven Distribution of Population in India

Population data are collected through Census operation held every 10 years in our country. The first population Census in India was conducted in 1872 but its first complete Census was conducted only in 1881. India is the second most populous country after China in the world with its total population of 1,028 million (2001). India's population is larger than the total population of North America, South America and Australia put together. More often, it is argued that such a large population invariably puts pressure on its limited resources and is also responsible for many socio-economic problems in the country.



- It is clear that India has a highly uneven pattern of population distribution.
- Uttar Pradesh has the highest population followed by Maharashtra, Bihar and West Bengal.
- On the other hand, share of population is very small in the states like Jammu & Kashmir, Arunachal Pradesh and Uttarakhand in spite of these states having fairly large geographical area.
- As far as the physical factors are concerned, it is clear that climate along with terrain and availability of water largely determines the pattern of population density.
- Among the socio-economic and historical factors of

distribution of population, important ones are evolution of settled agriculture and agricultural development; pattern of human settlement; development of transport network, industrialisation and urbanisation.

- The urban regions of Delhi, Mumbai, Kolkata, Bengaluru, Pune, Ahmedabad, Chennai and Jaipur have high concentration of population due to industrial development and urbanisation drawing a large number of ruralurban migrants.
- Density of population is expressed as number of persons per unit area. It helps in getting understanding of the spatial distribution of population in relation to land.
- The density of population in India (2011) is 382 persons per sq km.
- There has been a steady increase of more than 200 persons per sq km over the last 50 years as the density of population increased from 117 persons per sq km in 1951 to 382 persons per sq km in 2011.

#### Topic-2 Growth of Population: Two Components; Natural and Induced

- Growth in population is the change in the number of people living in a particular area between two points of time.
- Population growth has two components namely: natural and induced.
- The natural growth is analysed by assessing the crude birth and death rate.
- The induced components are explained by the volume of inward and outward movement of people in any given area.
- The decadal and annual growth rates of population in India are both very high and steadily increasing over time.
- The growth of population in India over the last one century has been caused by annual birth rate and death rate of migration and thereby shows different trends.
- There are four distinct phases of growth identified within this period.

**Phase I:** The period from 1901-1921 is referred to as a period of stagnant or stationary phase of growth of India's population, since in this period growth rate was very low, even recording a negative growth rate during 1911-1921. Both the birth rate and death rate were high keeping the rate of increase low. Poor health and medical services, illiteracy of people at large and inefficient distribution system of food and other basic necessities were largely responsible for a high birth and death rates in this period.

**Phase II:** The decades 1921-1951 are referred to as the period of steady population growth. An overall improvement in health and sanitation throughout the country brought down the mortality rate. At the same time better transport and communication system improved distribution system. The crude birth rate remained high in this period leading to higher growth rate than the previous phase. This is impressive at the

backdrop of Great Economic Depression, 1920s and World War II.

**Phase III:** The decades 1951-1981 are referred to as the period of population explosion in India, which was caused by a rapid fall in the mortality rate but a high fertility rate of population in the country. The average annual growth rate was as high as 2.2 per cent. It is in this period, after the Independence, that developmental activities were introduced through a centralised planning process and economy started showing up ensuring the improvement of living condition of people at large. Consequently, there was a high natural increase and higher growth rate. Besides, increased international migration bringing in Tibetans, Bangladeshis, Nepalis and even people from Pakistan contributed to the high growth rate.

**Phase IV:** In the post 1981 till present, the growth rate of country's population though remained high, has started slowing down gradually. A downward trend of crude birth rate is held responsible for such a population growth. This was, in turn, affected by an increase in the mean age at marriage, improved quality of life particularly education of females in the country. The growth rate of population is, however, still high in the country, and it has been projected by World Development Report that population of India will touch 1,350 million by 2025.

- A continuous belt of states from west to east in the north-west, north and north central parts of the country has relatively high growth rate than the southern states. During 2001-11, the growth rates of almost all States and Union territories have registered a lower figure compared to the previous decade, namely, 1991-2001.

- An important aspect of population growth in India is the growth of its adolescents. The adolescent population, though, regarded as the youthful population having high potentials, but at the same time they are quite vulnerable if not guided and channelised properly.

- There are some challenges for the society as far as the adolescences are concerned, some of which are lower age at marriage, illiteracy—particularly female illiteracy, school dropouts, low intake of nutrients, high rate of maternal mortality of adolescent mothers, high rates of HIV/AIDS infections, physical and mental disability or retardedness, drug abuse and alcoholism, juvenile delinquency and committance of crimes, etc.

- In these views, the Government of India has undertaken certain policies to impart proper education to the adolescent groups so that their talents are better channelised and properly utilised. The National Youth Policy is one example which has been designed to look into the overall development of our large youth and adolescent population.

### Topic-3 Population Composition: Rural, Urban, Linguistic, Religious and Composition of Working Population

- Population composition is a distinct field of study with a vast coverage of analysis of age and sex, place of residence, ethnic characteristics, tribes, language, religion, marital status, literacy and education, occupational characteristics, etc.

- The distribution of rural population is not uniform throughout the country.

- A thorough examination of the pattern of distribution of rural population in India reveals that both at intrastate and inter-state levels, the relative degree of urbanisation and extent of rural-urban migration regulate the

concentration of rural population.

- The proportion of urban population in India is quite low but it is showing a much faster rate of growth over the decades.

- India is a land of linguistic diversity.

- In the context of modern India, there are about 22 scheduled languages and a number of non-scheduled languages. Among the scheduled languages, the speakers of Hindi have the highest percentage.

Family	Sub-Family	Branch/Group	Speech Areas
Austro- (Nishada) 1.38%	Austro- Asiatic Austro- Nesian	Mon-Khmer Munda	Meghalaya, Nicobar Islands West Bengal, Bihar, Orissa, Assam, Madhya Pradesh, Maharashtra
Dravidian (Dravida) 20%		South Dravidian Central Dravidian North Dravidian	Tamil Nadu, Karnataka, Kerala Andhra Pradesh, M.P., Orissa, Maharashtra Bihar, Orissa, West Bengal, Madhya Pradesh
Sino- Tibetan (Kirata) 0.85%	Tibeto – Myanmari Siamese- Chinese	Tibeto- Himalayan North Assam Assam- Myanmari	Jammu & Kashmir, Himachal Pradesh, Sikkim Arunachal Pradesh West Bengal, Bihar, Orissa, Assam, Madhya Pradesh, Maharashtra
Indo – European (Aryan) 73%	Indo- Aryan	Iranian Dardic Indo- Aryan	Outside India Jammu & Kashmir Jammu & Kashmir, Punjab, Himachal Pradesh, U.P., Rajasthan, Haryana, M.P., Bihar, Orissa, West Bengal, Assam, Gujarat, Maharashtra, Goa.

- Religion is one of the dominant forces affecting the cultural and political life of most of the Indians. Hindus are distributed as a major group in many states ranging from 70-90 per cent and above.

Religious Groups	2001 Population (in million)	% of Total
Hindus	827.6	80.5
Muslims	138.2	13.5
Christians	24.1	2.3
Sikhs	19.2	1.9
Buddhists	8.0	0.9
Jains	4.2	0.4
Others	6.6	0.6

- The population of India according to their economic status is divided into three groups, namely: main workers, marginal workers and non-workers.

• It is observed that in India, the proportion of workers (both main and marginal) is only 39.8% in 2011 leaving a vast majority of above 60% as non-workers. The occupational composition of India's population shows a large proportion of primary sector workers as compared to secondary and tertiary sectors. The number of female workers is relatively high in primary sector, though in recent years there has been some improvement in work participation of women in secondary and tertiary sectors.

Categories	Persons	% to total Workers	Male	Female
Primary	26,30,22,473	54.6	16,54,47,075	9,75,75,398
Secondary	1,83,36,307	3.8	97,75,635	85,60,672
Tertiary	20,03,84,531	41.6	15,66,43,220	4,37,41,311

#### Occupational Categories

The 2001 Census has divided the working population of India into four major categories:

1. Cultivators
2. Agricultural Labourers
3. Household Industrial Workers
4. Other Workers.

It is important to note that the proportion of workers in agricultural sector in India has shown a decline over the last few decades (66.85% in 1991 to 58.2% in 2001). Consequently, the participation rate in secondary and tertiary sector has registered an increase. This indicates a shift of dependence of workers from farm-based occupations to non-farm based ones, indicating a sectoral shift in the economy of the country.

**Important Terms** **Population growth:** It is the change in the number of people living in a particular area between two points of time. **Population doubling time:** Population doubling time is the time taken by any population to double itself at its current annual growth rate.

## Chapter 2 Migration: Types, Causes And Consequences

### Topic-1 Migration: Types, Causes and Consequences

Migration has been an integral part and very important factor in redistributing population over time and space. India has witnessed the waves of migrants coming to the country from Central and West Asia and also from Southeast Asia.

- The history of India is a history of waves of migrations coming and settling one after another in different parts of the world.
- Similarly, large number of people from India too have been migrating to places in search of better opportunities specially to the countries of the Middle-East, Western Europe, America, Australia and East and South-East Asia.
- The actual migration was recorded beginning from the first Census of India conducted in 1881. This data was recorded on the basis of place of birth.
- However, the first major modification was introduced

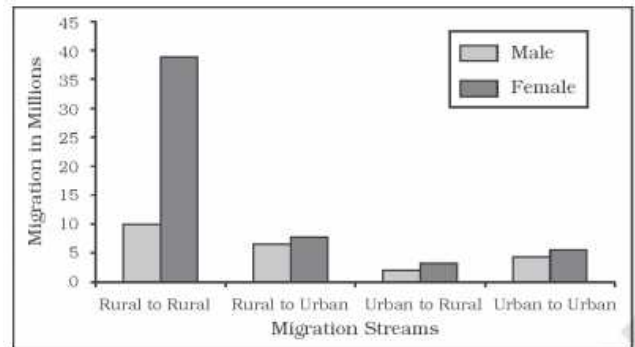
in 1961 Census by bringing in two additional components, viz; place of birth, *i.e.*, village or town and duration of residence (if born elsewhere).

• Further in 1971, additional information on place of last residence and duration of stay at the place of enumeration were incorporated.

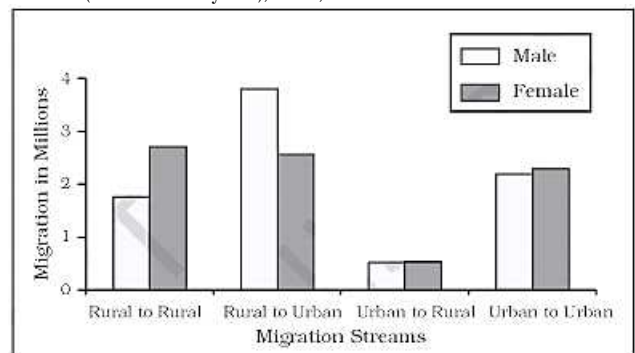
• The distribution of male and female migrants in different streams of intra-state migrations also vary. The actual migration was recorded beginning from the first Census of India conducted in 1881. This data was recorded on the basis of place of birth. However, the first major modification was introduced in 1961 Census by bringing in two additional components, viz; place of birth, *i.e.*, village or town and duration of residence (if born elsewhere). Further in 1971, additional information on place of last residence and duration of stay at the place of enumeration were incorporated.

Under the internal migration, four streams are identified: (a) rural to rural (R-R); (b) rural to urban (R-U); (c) urban to urban (U-U); and (d) urban to rural (U-R).

• The distribution of male and female migrants in different streams of intra-state migrations also vary. Females predominate the streams of short distance rural-to-rural migration in both types of migration. Contrary to this, men predominate the rural-to-urban stream of inter-state migration due to economic reasons.



a: Intra State Migration by Place of Last Residence Indicating Migration Streams (Duration 0-9 years), India, 2001



b: Inter State Migration by Place of Last Residence Indicating Migration Streams (Duration 0-9 years), India, 2001

- Females predominate the streams of short distance rural-to-rural migration in both types of migration. Contrary to this, men predominate the rural-to-urban stream of inter-state migration due to economic reasons.
- Apart from these streams of internal migration, India also experiences immigration from and emigration to the neighbouring countries.
- Census 2001 has recorded that more than 5 million people have migrated to India from other countries.
- As far as emigration from India is concerned it is estimated that there are around 20 million people of Indian Diaspora, spread across 110 countries.
- Among the urban agglomeration (UA), Greater Mumbai received the highest number of immigrants. Intra-states migration constituted the largest share in it. These differences are largely due to the size of the state in



which these urban agglomerations are located.

- Millions of people who are attached to their place of birth and residence leave and move to other places.
- There could be variety of reasons which can be put into two broad categories. The first being the push factors, these cause people to leave their place of residence or origin. The second being, pull factors, which attract the people from different places.
- In India, people migrate from rural to urban areas mainly due to poverty, high population pressure on the land, lack of basic infrastructural facilities like health care, education, etc.

### **Topic-2 Consequences of Migration: Economic, Demographic, Social, Environmental and Other Consequences**

- Migration is a response to the uneven distribution of opportunities over space.
- People tend to move from place of low opportunity and low safety to the place of higher opportunity and better safety. Thus, in turn creates both benefits and problems for the areas, people migrate from and migrate to.
- Consequences can be observed in economic, social, cultural, political and demographic terms.
- A major benefit for the source region is the remittance sent by migrants. Remittances from the international migrants are one of the major sources of foreign exchange.
- Punjab, Kerala and Tamil Nadu receive significant amount from their international migrants. The amount of remittances sent by the internal migrants is very meagre as compared to international migrants, but it plays an important role in the growth of the economy of the source area.
- Development of slums in industrially developed states such as Maharashtra, Gujarat, Karnataka, Tamil Nadu and Delhi is a negative consequence of unregulated migration within the country.
- Migration leads to the redistribution of the population within a country. Rural urban migration is one of the important factors contributing to the population growth of cities.
- Age and skill selective out migration from the rural area have adverse effect on the rural demographic structure.
- Migrants act as agents of social changes. The new ideas related to new technologies, family planning, girl's education, etc., get diffused from urban to rural areas through them.
- Migration leads to intermixing of people from diverse cultures.
- It has positive contribution such as evolution of composite culture and breaking through the narrow considerations and widens up the mental horizon of the people at large.
- But it also has some serious negative consequences such as anonymity, which creates social vacuum and sense of dejection may motivate people to fall in trap of anti-social activities like crime and drug abuse.
- Over-crowding of people due to rural-urban migration has put pressure on the existing social and physical infrastructure in the urban areas. This has led to unplanned growth of urban settlement and formation of slums and shanty colonies.
- Apart from these, cities are also facing the acute problem of depletion of groundwater, air pollution, disposal of sewage and management of solid wastes.

**Important Terms Remittance:** It is the payment that gets

sent somewhere else. **Diffuse:** Spread over a wide area or between a large number of people. **Shanty Colonies:** It is an area of settlement of improvised housing.

## **Chapter 3 Human Development**

### **Topic-1 Human Development: What is Human Development? Human Development in India, Indicators of Economic Attainments, Indicators of a Healthy Life.**

- Development of a few regions, individuals brought about in a short span of time leads to poverty and malnutrition for many along with large scale ecological degradation.
- Apparently, it is believed that "Development is Freedom" which is often associated with modernisation, leisure, comfort and affluence.
- In the present context, computerisation, industrialisation, efficient transport and communication network, large education system, advanced and modern medical facilities, safety and security of individuals, etc., are considered as the symbols of development.
- Every individual, community and government measures its performance or levels of development in relation to the availability and access to some of these things. But, this may be partial and one-sided view of development. It is often called the western or euro-centric view of development.
- Thus, for India, development is a mixed bag of opportunities as well as neglect and deprivations. There are a few areas like the metropolitan centres and other developed enclaves that have all the modern facilities available to a small section of its population.
- At the other extreme of it, there are large rural areas and the slums in the urban areas that do not have basic amenities like potable water, education and health infrastructure available to majority of this population.
- It is a well-established fact that majority of the scheduled castes, scheduled tribes, landless agricultural labourers, poor farmers and slums dwellers, etc., are the most marginalised group. A large segment of female population is the worst sufferers among all.
- There is yet another inter-related aspect of development that has direct bearings on the deteriorating human conditions. It pertains to the environmental pollution leading to ecological crisis.
- Consequently, the poor are being subjected to three inter-related processes of declining capabilities; *i.e.*, (i) social capabilities – due to displacement and weakening social ties (social capital), (ii) environmental capabilities – due to pollution and, (iii) personal capabilities – due to increasing incidence of diseases and accidents.
- Concerted efforts were made to look at development critically at various times in the past.
- India is ranked 131 among 188 countries of the world in terms of the Human Development Index (HDI).
- Low scores in the HDI is a matter of serious concern. Using the indicators selected by the UNDP, the Planning Commission of India also prepared the Human Development Report for India.
- It used states and the Union Territories as the units of analysis. Subsequently, each state government also started preparing the state level Human Development Reports, using districts as the units of analysis.
- Gross National Product (GNP) and its per capita availability are taken as measures to assess the resource

base/ endowment of any country.

- For India, it is estimated that its GDP was ` 3,200 thousand crores (at current price) and accordingly, per capita income was ` 20,813 at current prices.
- There are a few developed states like Maharashtra, Punjab, Haryana, Gujarat and Delhi that have per capita income more than ` 4,000 (figure at 1980-81 prices) per year and there are a large number of poorer states like Uttar Pradesh, Bihar, Odisha, Madhya Pradesh, Assam, Jammu and Kashmir, etc., which have recorded per capita income less than ` 2,000.
- It was estimated to be more than ` 690 per capita per month in States like Punjab, Haryana, Kerala, Maharashtra and Gujarat and below ` 520 per capita per month in States like Uttar Pradesh, Bihar, Odisha and Madhya Pradesh, etc.
- The states of Madhya Pradesh, Sikkim, Assam, Tripura, Arunachal Pradesh, Meghalaya and Nagaland have more than 30 per cent of their population below poverty line.
- Employment rate for educated youth is 25 per cent. Jobless growth and rampant unemployment are some of the important reasons for higher incidences of poverty in India.
- Availability of pre and post natal health care facilities in order to reduce infant mortality and post delivery deaths among mothers, old age health care, adequate nutrition and safety of individual are some important measures of a healthy and reasonably long life.
- The findings of 2011 Census of India are very disturbing particularly in case of child sex ratio between the age group of 0 year and 6 years.
- The other significant features of the report are, with the exception of Kerala, the child sex ratio has declined in all the states and it is most alarming in the developed state of Haryana and Punjab where it is below 850 female children per thousand male children.

## Topic-2 Indicators of Social Empowerment, Human Development Index in India

- Access to knowledge about the society and environment are fundamental to freedom.
- Literacy is the beginning of access to such a world of knowledge and freedom.
- Overall literacy in India is approximately 74.04 per cent (2011). while female literacy is 65.46 per cent.
- Total literacy as well as female literacy is higher than the national average in most of the states from South India.
- There are wide regional disparities in literacy rate across the states of India. There is a state like Bihar which has very low (63.82 per cent) literacy and there are states like Kerala and Mizoram which have literacy rates of 93.91 and 91.58 per cent, respectively.
- There has been improvement in the percentage of literates among the marginalised section yet the gap between the richer and the marginalised sections of the population has increased over the years.
- The Planning Commission calculated the Human Development Index by taking states and union territories as the unit of analysis.
- India has been placed among the countries showing medium human development.
- Kerala is able to record the highest value in the HDI largely due to its impressive performance in achieving near hundred per cent literacy (93.91 per cent) in 2011.
- In a different scenario the states like Bihar, Madhya Pradesh, Odisha, Assam and Uttar Pradesh have very

low literacy.

- States showing higher total literacy rates have less gaps between the male and female literacy rates.
- Apart from the educational attainment, the levels of economic development too play significant impacts on HDI.
- Economically developed states like Maharashtra, Tamil Nadu, Punjab and Haryana have higher value of HDI as compared to states like Chhattisgarh, Bihar, Madhya Pradesh, etc.
- Regional distortions and social disparities which developed during the colonial period continue to play an important role in the Indian economy, polity and society.
- The Government of India has made concerted efforts to institutionalise the balanced development with its main focus on social distributive justice through planned development.

## Topic-3 Population, Environment and Development

- Though, development has brought in significant improvement in the quality of life in more than one way but increasing regional disparities, social inequalities, discriminations, deprivations, displacement of people, abuse of human rights and undermining human values and environmental degradation have also increased.
- Development has only contributed in increasing the multiple uses of the limited resources of the world while there has been enormous increase in the demand for these resources. Therefore, the prime task before any development activity is to maintain parity between population and resources.
- Scholar like Sir Robert Malthus was the first one to voice his concern about the growing scarcity of resources as compared to the human population.
- Resources everywhere are unevenly distributed. Rich countries and people have access to large resource baskets while the poor find their resources shrinking.
- Moreover, unending pursuit for the control of more and more resources by the powerful and use of the same for exhibiting ones powers is the prime cause of conflicts as well as the apparent contradictions between population resource and development.
- Indian culture and civilisation have been very sensitive to the issues of population, resource and development for a long time.

**Important Terms Human Development:** It is a process of enlarging the range of people's choice, increasing their opportunities for education, health care, income and empowerment. **Poverty:** It is the state of deprivation. **Employment:** The state of having paid work. **Disparity:** Great difference. **GNP:** It is the market value of all the products and services produced in one year by labour and property supplied by the citizens of a country. **Per Capita Income:** Per capita income measures the average income earned per person in a given area (city, region, country, etc.) in a specified year. **Spatial variation:** It means variations across the global landscape that is normally associated with population. **Marginalised section:** It is a section of people that is confined to the lower or peripheral edge of the society. **Analysis:** Detailed examination of something. **Human Development Index:** The HDI is a statistical tool used to measure a country's overall achievement in its social and economic dimensions. **Substantive:** It means having a firm basis in reality. **Environmental Degradation:** It means deterioration of the environment through depletion of resources such as air, water and soil.

## Chapter 4 Human Settlements

### Topic-1 Types of Rural Settlement: Clustered Settlements, Semi-Clustered Settlements, Hamleted Settlements, Dispersed Settlements

- Human settlement means cluster of dwellings of any type or size where human beings live. The process of settlement inherently involves grouping of people and apportioning of territory as their resource base.
- Settlements vary in size and type. They range from a hamlet to metropolitan cities. With size, the economic character and social structure of settlements changes and so do its ecology and technology. Settlements could be small and sparsely spaced; they may also be large and closely spaced. The sparsely located small settlements are called villages, specialising in agriculture or other primary activities. On the other hand, there are fewer but larger settlements which are termed as urban settlements specialising in secondary and tertiary activities.
- Types of the settlement are determined by the extent of the built-up area and inter-house distance. In India, compact or clustered village of a few hundred houses is a rather universal feature, particularly in the Northern Plains.
- There are various factors and conditions responsible for having different types of rural settlements in India. These include: (i) physical features – nature of terrain, altitude, climate and availability of water (ii) cultural and ethnic factors – social structure, caste and religion (iii) security factors – defence against thefts and robberies. Rural settlements in India can broadly be put into four types:
  - Clustered, agglomerated or nucleated,
  - Semi-clustered or fragmented,
  - Hamleted, and
  - Dispersed or isolated.
- The clustered rural settlement is a compact or closely built up area of houses. The closely built-up area and its intervening streets present some recognisable pattern or geometric shape, such as rectangular, radial, linear, etc. Sometimes, people live in compact village for security or defence reasons, such as in the Bundelkhand region of central India and in Nagaland.
- Semi-clustered or fragmented settlements may result from tendency of clustering in a restricted area of dispersed settlement. More often such a pattern may also result from segregation or fragmentation of a large compact village. Such settlements are widespread in the Gujarat plain and some parts of Rajasthan.
- Hamleted Settlements: Sometimes settlement is fragmented into several units physically separated from each other bearing a common name. These units are locally called panna, para, palli, nagla, dhani, etc., in various parts of the country. Such villages are more frequently found in the middle and lower Ganga plain, Chhattisgarh and lower valleys of the Himalayas.
- Dispersed or isolated settlement pattern in India appears in the form of isolated huts or hamlets of few huts in remote jungles, or on small hills with farms or pasture on the slopes. Many areas of Meghalaya, Uttarakhand, Himachal Pradesh and Kerala have this type of settlement.

### Topic-2 Urban Settlements, Evolution of Towns in India: Ancient Towns,

### Medieval Towns, Modern Towns

- Unlike rural settlements, urban settlements are generally compact and larger in size. They are engaged in a variety of non-agricultural, economic and administrative functions.
- The cities are functionally linked to rural areas around them. Thus, exchange of goods and services is performed sometimes directly and sometimes through a series of market towns and cities. Thus, cities are connected directly as well as indirectly with the villages and also with each other.
- Towns flourished since prehistoric times in India. Even at the time of Indus Valley civilisation, towns like Harappa and Mohenjodaro were in existence. It continued with periodic ups and downs until the arrival of Europeans in India in the eighteenth century.
- On the basis of their evolution in different periods, Indian towns may be classified as: Ancient towns, Medieval towns, and Modern towns. There are number of towns in India having historical background spanning over 2000 years. They are known as ancient towns.
- About 100 of the existing towns have their roots in the medieval period. Most of them developed as headquarters of principalities and kingdoms. These are fort towns which came up on the ruins of ancient towns. They are known as medieval towns.
- The British and other Europeans have developed a number of towns in India. Starting their foothold on coastal locations, they first developed some trading ports such as Surat, Daman, Goa, Puducherry, etc. These are known as modern towns.

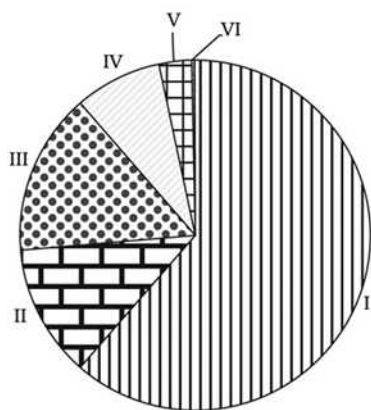
### Topic-3 Urbanisation in India, Classifi- cation of Towns on the Basis of Population Size

- The level of urbanisation is measured in terms of percentage of urban population to total population. The level of urbanisation in India in 2011 was 31.16 per cent, which is quite low in comparison to developed countries.
- Enlargement of urban centres and emergence of new towns have played a significant role in the growth of urban population and urbanisation in the country. But the growth rate of urbanisation has slowed down during last two decades.
- Urban centre with population of more than one lakh is called a city or class I town. Cities accommodating population size between one to five million are called metropolitan cities and more than five million are mega cities.

#### Classification of Towns on the basis of Population Size

Census of India classifies urban centres into six classes as presented in Table 4.2. Urban centre with population of more than one lakh is called a city or class I town. Cities accommodating population size between one to five million are called metropolitan cities and more than five million are mega cities. Majority of metropolitan and mega cities are urban agglomerations. An urban agglomeration may consist of any one of the following three combinations: (i) a town and its adjoining urban outgrowths, (ii) two or more contiguous towns with or without their outgrowths, and (iii) a city and one or more adjoining towns with their outgrowths together forming a contiguous spread. Examples of urban outgrowth are railway colonies, university campus, port area, military cantonment, etc. located within the revenue limits of a village or villages contiguous to the town or city.





India: Distribution of urban population (%), according to size class of urban centre — 2001

- Majority of metropolitan and mega cities are urban agglomerations. More than 60 per cent of urban population in India lives in class I towns. Out of 468 cities, 53 cities/urban agglomerations are metropolitan cities. Six of them are mega cities with population over five million each. More than one-fifth (21.0%) of urban population lives in these mega cities.

### INDIA – CLASS-WISE NUMBER OF TOWNS AND CITIES AND THEIR POPULATION, 2001

Class	Population Size	Number	Population (Million)	% of total Urban Population	% Growth 1991-2001
All		5161	285.35	100	31.13
I	1,00,000 and more	423	172.04	61.48	23.12
II	50,000 – 99,999	498	34.43	12.3	43.45
III	20,000 – 49,999	1386	41.97	15.0	46.19
IV	10,000 – 9,999	1560	22.6	8.08	32.94
V	5,000 – 9,999	1057	7.98	2.85	41.49
VI	Less than 5,000	227	0.8	0.29	21.21

### Topic-4 Functional Classification of Towns

- Apart from their role as central or nodal places, many towns and cities perform specialised services.
- Administrative towns and cities:** Towns supporting administrative headquarters of higher order are administrative towns, such as Chandigarh and New Delhi.
- Industrial towns:** Industries constitute prime motive force of these cities such as Mumbai.
- Transport Cities:** They may be ports primarily engaged in export and import activities such as Kandla and Kozhikode.
- Commercial towns:** Towns and cities specialising in trade and commerce are kept in this class.
- Mining towns:** These towns have developed in mineral rich areas such as Raniganj.
- Garrison/ Cantonment:** These towns emerged as garrison towns such as Ambala.
- Educational towns:** Starting as centres of education, some of the towns have grown into major campus towns such as Roorkee.
- Religious and cultural towns:** Varanasi, Mathura, Amritsar, Madurai, Puri, Ajmer, Pushkar, Tirupati, Kurukshetra, Haridwar, Ujjain came to prominence due

to their religious/cultural significance.

- Tourist towns:** Nainital, Mussoorie, Shimla, Pachmarhi, Jodhpur, Jaisalmer, Udagamandalam (Ooty), Mount Abu are some of the tourist destinations.
- The cities are not static in their function. The functions change due to their dynamic nature.

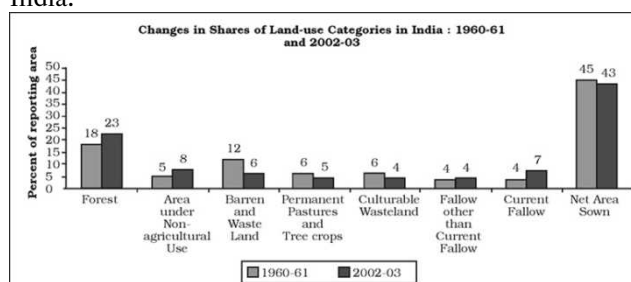
**Important Terms Human Settlement:** It means cluster of dwellings of any type or size where human beings live. **Rural:** Located outside city or town. **Urban:** Situated in city or town. **Barns:** Building for storing grains, etc. **Pastures:** Land covered with grass, etc., for grazing animals. **Villages:** Group of houses, etc., situated together. It is larger than a hamlet and smaller than town. **Medieval Period:** The Middle Age. **Consolidated:** Combined. **Town:** Places which have less than one lakh population. **City:** Urban centres having population between one lakh to one million. **Metropolitan Cities:** Cities having population in between one million to five million. **Mega Cities:** Cities having more than 5 million population. **Mega Cities:** Cities having more than 5 million population are known as mega cities. **Urban Agglomeration:** It is an extended city or town area comprising the build up area of a central place and any suburbs linked by continuous urban area. **Contiguous:** Infectious. **Hub:** Central place. **Garrison:** A military area where the troops are stationed. **Know the Facts** Cities developed on river banks as early as 3000 BCE, when some of the first well-developed settlements arose in Mesopotamia, on the banks of Egypt's Nile River in the Indus River valley, and along China's rivers. Though early "cities" appeared at Jericho and Catal Huyuk around 6000 BCE, the first civilisations did not emerge until around 3000 BCE in Egypt and Mesopotamia. The development of agriculture permitted the creation of the first cities.

## Chapter 5 Land Resources And Agriculture

### Topic-1 Land Use Categories, Land-Use Changes in India, Common Property Resources

Different types of lands are suited to different uses. Human beings thus, use land as a resource for production as well as residence and recreation.

- Land-use records are maintained by Land Revenue Department. The land-use categories add up to reporting area, which is somewhat different from the geographical area. The Survey of India is responsible for measuring geographical area of administrative units in India.



- The land-use categories as maintained in the Land Revenue Records are as follows:

- Forests:** It is important to note that area under actual forest cover is different from area classified as forest. The latter is the area which the Government has identified and demarcated for forest growth. The land revenue records are consistent with the latter definition.
- Land put to Non-agricultural Uses:** Land under settlements (rural and urban), infrastructure (roads, canals, etc.), industries, shops, etc., are included in this category.
- Barren and Wastelands:** The land which may be classified as a wasteland such as barren hilly terrains,

desert lands, ravines, etc., normally cannot be brought under cultivation with the available technology.

**(iv) Area under Permanent Pastures and Grazing Lands:** Most of this type of land is owned by the Village Panchayat or the Government. Only a small proportion of this land is privately owned.

**(v) Area under Miscellaneous Tree Crops and Groves**

**(not included in net sown area):** The land under orchards and fruit trees are included in this category.

**(vi) Culturable Wasteland:** Any land which is left fallow (uncultivated) for more than five years is included in this category.

**(vii) Current Fallow:** This is the land which is left without cultivation for one or less than one agricultural year.

**(viii) Fallow other than Current Fallow:** This is also a cultivable land which is left uncultivated for more than a year but less than five years.

**(ix) Net Area Sown:** The physical extent of land on which crops are sown and harvested is known as Net Sown Area.

- Land-use in a region, to a large extent, is influenced by the nature of economic activities carried out in that region.

- One needs to appreciate three types of changes that an economy undergoes, which affect land-use. Firstly, The size of the economy grows over time as a result of increasing population, change in income levels, available technology and associated factors. As a result, the pressure on land will increase with time.

- Secondly, the composition of the economy would undergo a change over time. In other words, the secondary and the tertiary sectors usually grow much faster than the primary sector, specifically the agricultural sector. This type of change is common in developing countries like India. This process would result in a gradual shift of land from agricultural uses to non-agricultural uses.

- Thirdly, though the contribution of the agricultural activities reduces over time, the pressure on land for agricultural activities does not decline.

- India has undergone major changes within the economy over the past four or five decades, and this has influenced the land-use changes in the country. The rate of increase is the highest in case of area under non-agricultural uses. This is due to the changing structure of Indian economy, which is increasingly depending on the contribution from industrial and service sectors and expansion of related infrastructural facilities.

- The increase in the share under forest, as explained before, can be accounted for by increase in the demarcated area under forest rather than an actual increase in the forest cover in the country.

- The four categories that have registered a decline are barren and wasteland, culturable wasteland, area under pastures and tree crops and net area sown.

- Land, according to its ownership can broadly be classified under two broad heads – private land and common property resources (CPRs). CPRs can be defined as community's natural resource, where every member has the right of access and usage with specified obligations, without anybody having property rights over them. While the former is owned by an individual or a group of individuals, the latter is owned by the state meant for the use of the community. CPRs provide fodder for the livestock and fuel for the households along with other minor forest products like fruits, nuts,

fibre, medicinal plants, etc. CPRs are also important for women as most of the fodder and fuel collection is done by them in rural areas. They have to devote long hours in collecting fuel and fodder from a degraded area of CPR.

## Topic-2 Agricultural Land Use in India, Cropping Seasons in India, Types of Farming

- Agriculture is a purely land-based activity unlike secondary and tertiary activities. Thus, lack of access to land is directly correlated with incidence of poverty in rural areas. Quality of land has a direct bearing on the productivity of agriculture, which is not true for other activities.

- In rural areas, aside from its value as a productive factor, land ownership has a social value and serves as a security for credit, natural hazards or life contingencies, and also adds to the social status.

- An estimation of total stock of agricultural land resources (*i.e.*, total cultivable land can be arrived at by adding up net sown area, all fallow lands and culturable wasteland. There has been a greater decline of cultivated land, in spite of a corresponding decline of cultivable wasteland.

- There are three distinct crop seasons in the northern and interior parts of country, namely kharif, rabi and zaid.

- The kharif season largely coincides with South-West Monsoon under which the cultivation of tropical crops such as rice, cotton, jute, jowar, bajra and tur is possible.

- The rabi season begins with the onset of winter in October-November and ends in March-April.

- Zaid is a short duration summer cropping season beginning after harvesting of rabi crops.

Cropping Season	Major Crops Cultivated
Kharif (June-September)	Rice, Cotton, Bajra, Maize, Jowar, Tur
Rabi (October – March)	Wheat, Gram, Rapeseeds and Mustard, Barley
Zaid (April–June)	Vegetables, Fruits, Fodder

	Northern States	Southern States
Kharif (June-September)	Rice, Cotton, Bajra, Maize, Jowar, Tur	Rice, Maize, Ragi, Jowar, Groundnut
Rabi (October – March)	Wheat, Gram, Rapeseeds and Mustard, Barley	Rice, Maize, Ragi, Groundnut, Jowar
Zaid (April–June)	Vegetables, Fruits, Fodder	Rice, Vegetables, Fodder

- However, this type of distinction in the cropping season does not exist in southern parts of the country. Here, the temperature is high enough to grow tropical crops during any period in the year provided the soil moisture is available.

## Types of Farming

On the basis of main source of moisture for crops, the farming can be classified as **irrigated** and **rainfed** (barani). There is difference in the nature of irrigated farming as well based on objective of irrigation, *i.e.* protective or productive. The objective of protective irrigation is to protect the crops from adverse effects of soil moisture deficiency which often means that irrigation acts as a supplementary source of water over and above the rainfall. The strategy of this kind of irrigation is to provide soil moisture to maximum possible area. Productive irrigation is meant to provide sufficient soil moisture in the cropping season to achieve high productivity. In such irrigation the water input per unit area of cultivated land is higher than protective irrigation. Rainfed farming is further classified on the basis of adequacy of soil moisture

during cropping season into dryland and wetland farming. In India, the **dryland farming** is largely confined to the regions having annual rainfall less than 75 cm. These regions grow hardy and drought resistant crops such as ragi, bajra, moong, gram and guar (fodder crops) and practise various measures of soil moisture conservation and rain water harvesting. In **wetland farming**, the rainfall is in excess of soil moisture requirement of plants during rainy season. Such regions may face flood and soil erosion hazards. These areas grow various water intensive crops such as rice, jute and sugarcane and practise aquaculture in the fresh water bodies.

### Topic-3 Cropping Patterns

- Foodgrains are dominant crops in all parts of the country whether they have subsistence or commercial agricultural economy.
- On the basis of structure of grain, the foodgrains are classified as cereals and pulses.
- The cereals occupy about 54 per cent of total cropped area in India. The country produces about 11 per cent cereals of the world and ranks third in production after China and USA
- Rice is a staple food for the overwhelming majority of population in India. Though, it is considered to be a crop of tropical humid areas, it has about 3,000 varieties which are grown in different agro-climatic regions.
- India contributes 21.2 per cent of rice production in the world and ranks second after China. West Bengal, Punjab, Uttar Pradesh, were the leading rice producing states in the country in 2015-16.
- Wheat is the second most important cereal crop in India after rice. India produces about 13.1 per cent of total wheat production of world (2014). Uttar Pradesh, Punjab, Haryana, Rajasthan and Madhya Pradesh are five leading wheat producing states.
- The coarse cereals together occupy about 16.50 per cent of total cropped area in the country. Maharashtra alone produces more than half of the total jowar production of the country. Other leading producer states of jowar are Karnataka, Madhya Pradesh Andhra Pradesh and Telangana.
- Bajra is sown in hot and dry climatic conditions in north-western and western parts of the country. Leading producers of bajra are the states of Maharashtra, Gujarat, Uttar Pradesh, Rajasthan and Haryana.
- Maize is a food as well as fodder crop grown under semi-arid climatic conditions and over inferior soils. The leading producers of maize are the states of Karnataka, Madhya Pradesh, Bihar, Andhra Pradesh, Telangana, Rajasthan and Uttar Pradesh.
- Pulses are a very important ingredient of vegetarian food as these are rich sources of proteins. Pulses occupy about 11 per cent of the total cropped area in the country. Being the rainfed crops of drylands, the yields of pulses are low and fluctuate from year to year.
- Gram is cultivated in subtropical areas. Just one or two light showers or irrigations are required to grow this crop successfully. Madhya Pradesh, Uttar Pradesh, Maharashtra, Andhra Pradesh, Telangana and Rajasthan are the main producers of this pulse crop.
- Tur (Arhar) is the second important pulse crop in the country. Maharashtra alone contributes about one-third of the total production of tur. Other leading producer states are Uttar Pradesh, Karnataka, Gujarat and Madhya Pradesh.
- The oilseeds are produced for extracting edible oils. Drylands of Malwa Plateau, Marathwada, Gujarat,

Rajasthan, Telangana and Rayalaseema region of Andhra Pradesh and Karnataka Plateau are oilseeds growing regions of India.

- India produces about 14.9 per cent of the total groundnut production in the world (2014). Gujarat, Tamil Nadu, Telangana, Andhra Pradesh, Karnataka and Maharashtra are the leading producers.
- Rapeseed and mustard comprise several oilseeds as rai, sarson, toria and taramira. Rajasthan contributes about one-third production while other leading producers are Uttar Pradesh, Haryana, West Bengal and Madhya Pradesh.
- Cotton is a tropical crop grown in kharif season in semi-arid areas of the country. Leading producers of this crop are Maharashtra, Gujarat, Telangana, Andhra Pradesh, Punjab and Haryana.
- Jute is used for making coarse cloth, bags, sacks and decorative items. West Bengal accounts for about three-fourth of the production in the country. Bihar and Assam are other jute growing areas.
- Sugarcane is a crop of tropical areas. In Indo-Gangetic Plain, its cultivation is largely concentrated in Uttar Pradesh. Sugarcane growing area in western India is spread over Maharashtra and Gujarat.
- Tea leaves have rich content of caffeine and tannin. It is an indigenous crop of hills in northeastern area. Tea is cultivated on the lower slopes of Nilgiri and Cardamom hills in Western Ghats.
- Coffee is a tropical plantation crop. Its seeds are roasted, ground and are used for preparing a beverage. Coffee is cultivated in the highlands of Western Ghats in Karnataka, Kerala and Tamil Nadu. Karnataka alone accounts for more than two-thirds of total production of coffee in the country.

### Topic-4 Agricultural Development in India, Growth of Agricultural Output and Technology

- The importance of agricultural sector in India can be gauged from the fact that about 57 per cent of its land is devoted to crop cultivation, whereas, in the world, the corresponding share is only about 12 per cent.
- Despite various constraints, Indian agriculture has marched a long way since Independence.
- During Partition about one-third of the irrigated land in undivided India went to Pakistan.
- After Independence, the immediate goal of the Government was to increase foodgrains production by (i) switching over from cash crops to food crops; (ii) intensification of cropping over already cultivated land; and (iii) increasing cultivated area by bringing cultivable and fallow land under plough.
- New seed varieties of wheat (Mexico) and rice (Philippines) known as high yielding varieties (HYVs) were available for cultivation by mid-1960s.
- India took advantage of this and introduced package technology comprising HYVs, along with chemical fertilizers in irrigated areas of Punjab, Haryana, western Uttar Pradesh, Andhra Pradesh and Gujarat.
- This strategy of agricultural development paid dividends instantly and increased the foodgrains production at very fast rate. This spurt of agricultural growth came to be known as 'Green Revolution.'
- Green Revolution was initially confined to irrigated areas only.
- The Planning Commission of India focused its attention on the problems of agriculture in rainfed areas in 1980s.
- There has been a significant increase in agricultural



output and improvement in technology during the last fifty years.

- Production and yield of many crops such as rice and wheat has increased at an impressive rate.
- Expansion of irrigation has played a very crucial role in enhancing agricultural output in the country.
- Modern agricultural technology has diffused very fast in various areas of the country. Consumption of chemical fertilizers has increased by 15 times since mid-sixties.

### Topic-5 Problems of Indian Agriculture

- The nature of problems faced by Indian agriculture varies according to agro-ecological and historical experiences of its different regions.
- Poor performance of south-west monsoon also adversely affects the supply of canal water for irrigation. On the other hand, the rainfall in Rajasthan and other drought prone areas is too meagre and highly unreliable.
- Drought is a common phenomenon in low rainfall areas which may also experience occasional floods. The flash floods in drylands of Maharashtra, Gujarat, and Rajasthan in 2006 are examples of this phenomenon. Droughts and floods continue to be twin menace in Indian agriculture.
- Because of the very high pressure on the land resources, the labour productivity in Indian agriculture is also very low in comparison to international level. The vast rainfed areas of the country, particularly drylands which mostly grow coarse cereals, pulses and oilseeds have very low yields.
- The inputs of modern agriculture are very expensive. This resource intensive approach has become unmanageable for marginal and small farmers as they have very meagre or no saving to invest in agriculture.
- Crop failures and low returns from agriculture have forced them to fall in the trap of indebtedness.
- Lack of implementation of land reforms has resulted in continuation of iniquitous distribution of cultivable land which is detrimental to agricultural development.
- In India, the land holdings are mostly fragmented. There are some states where consolidation of holding has not been carried out even once. The small size fragmented land holdings are uneconomic.
- A large number of farmers produce crops for self-consumption. These farmers do not have enough land resources to produce more than their requirement.
- There is massive under-employment in the agricultural sector in India, particularly in the unirrigated tracts. In these areas, there is a seasonal unemployment ranging from 4 months to 8 months.
- One of the serious problems that arises out of faulty strategy of irrigation and agricultural development is degradation of land resources. This is serious because it may lead to depletion of soil fertility.
- Excessive use of chemicals such as insecticides and pesticides has led to their concentration in toxic amounts in the soil profile.
- Rainfed areas in humid and semi-arid tropics also experience degradation of several types like soil erosion by water and wind erosion which are often induced by human activities.

**Important Terms** **Barren land:** Land which is incapable of producing offspring, seed or fruit. **Wasteland:** It is an empty area of land. **Fallow land:** A land which is left uncultivated for a time after successive crops. **Net Area Sown:** The physical extent of land on which crops are sown and harvested is known as net sown area. **Common Property Resource:** CPRs can be defined as community's natural resource, where every member has the right of access and usage with specified obligations, without anybody having property rights over.

**Kharif:** This cropping season is from July–October. **Rabi:** This cropping season is from October – March. **Dryland Farming:** It is a farming technique used for non-irrigated cultivation of crops. It is practiced in regions of slight or insufficient rainfall. **Subsistence Agriculture:** It is self-sufficiency farming in which the farmers focus on growing enough food to feed themselves and their families. **Ghats:** Mountains. **Rainfed Farming:** It means the farming that relies on rainfall for water. **Cash Crop:** The crops that are grown to be sold rather than for use by the farmer. **Food Crop:** The crops that are grown for self-consumption and not for sale in the market is known as food crop. **Agro-processing industries:** The industries that transform products originating from agriculture, forestry and fisheries. **Green Revolution:** The great increase in production of foodgrains due to the introduction of high-yielding varieties, to the use of pesticides, and to better management techniques is known as the Green Revolution.

## Chapter 6 Water Resources

### Topic-1 Water Resources of India: Surface Water Resources, Groundwater Resources, Lagoons and Backwaters

- Water is a cyclic resource with abundant supplies on the globe. Approximately, 71 per cent of the earth's surface is covered with it but fresh water constitutes only about 3 per cent of the total water.
- In fact, a very small proportion of fresh water is effectively available for human use. The availability of fresh water varies over space and time. The assessment, efficient use and conservation of water, therefore, become necessary to ensure development.



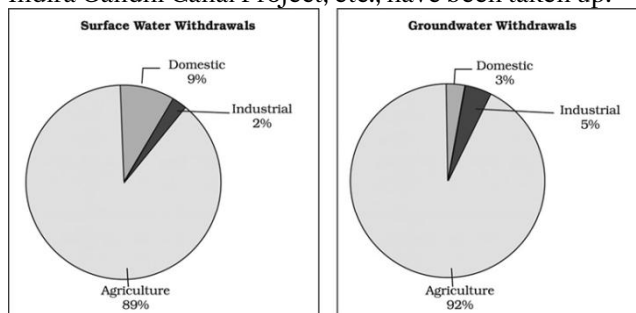
- India accounts for about 2.45 per cent of world's surface area, 4 per cent of the world's water resources and about 16 per cent of world's population. The total water available from precipitation in the country in a year is about 4,000 cubic km. The availability from surface water and replenishable groundwater is 1,869 cubic km. Out of this only 60 per cent can be put to beneficial uses. Thus, the total utilisable water resource in the country is only 1,122 cubic km. However, due to

topographical, hydrological and other constraints, only about 690 cubic km (32 per cent) of the available surface water can be utilised.

- There are four major sources of surface water. These are rivers, lakes, ponds, and tanks. Water flow in a river depends on size of its catchment area or river basin and rainfall within its catchment area. Much of the annual water flow in south Indian rivers like the Godavari, the Krishna, and the Kaveri has been harnessed, but it is yet to be done in the Brahmaputra and the Ganga basins.
- The total replenishable groundwater resources in the country are about 432 cubic km. The level of groundwater utilisation is relatively high in the river basins lying in north-western region and parts of south India.
- The groundwater utilisation is very high in the states of Punjab, Haryana, Rajasthan, and Tamil Nadu. However, there are states like Chhattisgarh, Odisha, Kerala, etc., which utilise only a small proportion of their groundwater potentials.
- India has a vast coastline and the coast is very indented in some states. Due to this, a number of lagoons and lakes have formed. The states like Kerala, Odisha and West Bengal have vast surface water resources in these lagoons and lakes.

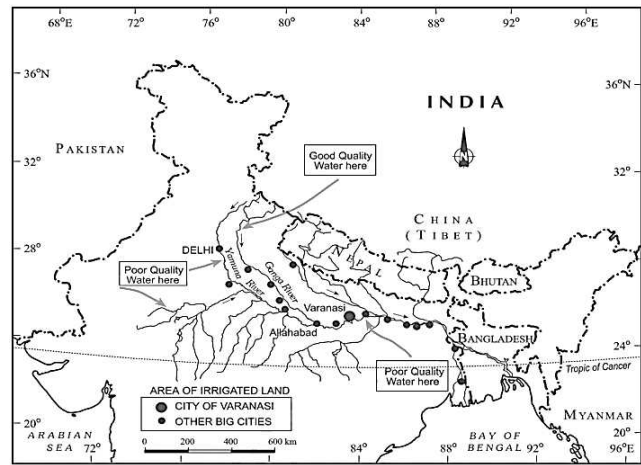
## Topic-2 Water Demand and Utilisation: Demand of Water for Irrigation

- India has traditionally been an agrarian economy, and about two-thirds of its population has been dependent on agriculture. Hence, development of irrigation to increase agricultural production has been assigned a very high priority in the Five Year Plans, and multipurpose river valleys projects like the Bhakra-Nangal, Hirakud, Damodar Valley, Nagarjuna Sagar, Indira Gandhi Canal Project, etc., have been taken up.



*Sectoral Usage of Surface Water  
Sectoral Usage of Groundwater*

- Agriculture accounts for most of the surface and groundwater utilisation, it accounts for 89 per cent of the surface water and 92 per cent of the groundwater utilisation.
- While the share of industrial sector is limited to 2 per cent of the surface water utilisation and 5 per cent of the groundwater, the share of domestic sector is higher (9 per cent) in surface water utilisation as compared to groundwater.
- Irrigation is needed because of spatio-temporal variability in rainfall in the country. The large tracts of the country are deficient in rainfall and are drought prone. North-western India and Deccan Plateau constitute such areas. Provision of irrigation makes multiple cropping possible. It has also been found that irrigated lands have higher agricultural productivity than unirrigated land.



*The Ganga and its Tributaries and Towns Located on them*

- Further, the high-yielding varieties of crops need regular moisture supply, which is made possible only by a developed irrigation system. In Punjab, Haryana and western Uttar Pradesh more than 85 per cent of their net sown area is under irrigation.
- Of the total net irrigated area 76.1 per cent in Punjab and 51.3 per cent in Haryana are irrigated through wells and tube-wells. This shows that these states utilise large proportion of their groundwater potential which has resulted in groundwater depletion in these states.

## PERCENTAGE OF NET IRRIGATED AREA TO TOTAL BY WELLS AND TUBE-WELLS

State	Percentage
Gujarat	86.6
Rajasthan	77.2
Madhya Pradesh	66.5
Maharashtra	65
Uttar Pradesh	58.21
West Bengal	57.6
Tamil Nadu	54.7

## Topic-3 Emerging Water Problems: Deterioration of Water Quality, Water Conservation and Management, Prevention of Water Pollution, Recycle and Reuse of Water

- The per capita availability of water is dwindling day by day due to increase in population.
- When toxic substances enter lakes, streams, rivers, ocean and other water bodies, they get dissolved or lie suspended in water. This results in pollution of water whereby quality of water deteriorates affecting aquatic systems. Sometimes, these pollutants also seep down and pollute groundwater. The Ganga and the Yamuna are the two highly polluted rivers in the country.
- Given that water availability from sea/ocean, due to high cost of desalinisation, is considered negligible, India has to take quick steps and make effective policies and laws, and adopt effective measures for its conservation. There is need to encourage watershed development, rainwater harvesting, water recycling and reuse, and conjunctive use of water for sustaining water supply in long run.
- The drains carrying agricultural (fertilisers and insecticides), domestic (solid and liquid wastes), and industrial effluents join the rivers. The concentration of pollutants in rivers, especially remains very high during the summer season when flow of water is low.
- The Central Pollution Control Board (CPCB) in collaboration with State Pollution Control Boards has been monitoring water quality of national aquatic resources at 507 stations.

- There is a strong need to generate public awareness about importance of water and impacts of water pollution. The public awareness and action can be very effective in reducing the pollutants from agricultural activities, domestic and industrial discharges.
- Another way through which we can improve fresh water availability is by recycle and reuse. Use of water of lesser quality such as reclaimed waste water would be an attractive option for industries for cooling and fire fighting to reduce their water cost. Similarly, in urban areas water after bathing and washing utensils can be used for gardening. Water used for washing vehicle can also be used for gardening.
- Currently, recycling of water is practised on a limited scale. However, there is enormous scope for replenishing water through recycling.

#### Topic-4 Watershed Management: Rainwater Harvesting

- Watershed management basically refers to efficient management and conservation of surface and groundwater resources. It involves prevention of runoff and storage and recharge of groundwater through various methods like percolation tanks, recharge wells, etc.
- However, in broad sense watershed management includes conservation, regeneration and judicious use of all resources – natural (like land, water, plants and animals) and human within a watershed.
- Watershed management aims at bringing about balance between natural resources on the one hand and society on the other. The Central and State Governments have initiated many watershed development and management programmes in the country.
- Haryali is a watershed development project sponsored by the Central Government which aims at enabling the rural population to conserve water for drinking, irrigation, fisheries and afforestation.
- Neeru-Meeru (Water and You) programme (in Andhra Pradesh) and Arvary Pani Sansad (in Alwar, Rajasthan) have taken up constructions of various water-harvesting structures such as percolation tanks, dug out ponds (Johad), check dams, etc., through people's participation.
- Watershed development projects in some areas have been successful in rejuvenating environment and economy. There is a need to generate awareness regarding benefits of watershed development and management among people in the country.
- Rainwater harvesting is a method to capture and store rainwater for various uses. Rainwater harvesting has been practised through various methods by different communities in the country for a long time. Traditional rainwater harvesting in rural areas is done by using surface storage bodies like lakes, ponds, irrigation tanks, etc.
- There is a wide scope to use rainwater harvesting technique to conserve precious water resource. It can be done by harvesting rainwater on rooftops and open spaces. These days rainwater harvesting is being taken up on massive scale in many states in the country. Urban areas can specially benefit from rainwater harvesting as water demand has already outstripped supply in most of the cities and towns.

**Important Terms** **Abundant:** Existing in or available in large quantities. **Replenishable Resources:** Resources that can be renewed. **Tributary:** A river stream flowing into a larger river or lake. **River drainage basin:** A river basin is an area drained by a river and all of its tributaries. **Catchment area:** The area from which rainfall flows into a river, lake or reservoir.

**Groundwater:** Water held underground in the soil or in pores and crevices in rocks. **Lagoons:** An area of shallow body of water separated from the sea by barrier islands or reefs.

**Backwater:** A part of the river in which there is little or no current. It refers to a branch of a main river which lies alongside it and then rejoins it backed by the tides or by an obstruction such as a dam. **Brackish water:** Water that has more salinity than fresh water but not as much as seawater.

**Agrarian economy:** An agrarian economy is a type of economy that relies primarily on agricultural industry including livestock farming or crop production. **Irrigation:** It can be defined as the supply of water to land or crops to help growth, typically by means of channels. **Deficient:** It means not having enough of a specified quality or ingredient. **Toxic substances:** A substance that can be poisonous or cause health effects. **Desalinisation:** It can be defined as a process that extracts minerals from saline water. **Reclaimed waste water:** It means using treated waste water for other purposes.

## Chapter 7 Mineral And Energy Resources

### Topic-1 Types of Mineral Resources: Metallic Minerals, Non- Metallic Minerals.

- India is endowed with a rich variety of mineral resources due to its varied geological structure.
- The vast alluvial plain tract of North India is devoid of minerals of economic use. The mineral resources provide the country with the necessary base for industrial development.
- On the basis of chemical and physical properties, minerals may be grouped under two main categories of metallic and non-metallic.
- Iron ore, copper, gold produce metal and are included in metallic category.
- Metallic minerals are further divided into ferrous and non-ferrous metallic minerals.
- Ferrous refers to iron. All those minerals which have iron content are ferrous such as iron ore itself and those which do not have iron content are non-ferrous such as copper, bauxite, etc.
- Non-metallic minerals are either organic in origin such as fossil fuels also known as mineral fuels which are derived from the buried animal and plant life such as coal and petroleum.
- Other type of non-metallic minerals is inorganic in origin such as mica, limestone and graphite, etc.
- India is endowed with fairly abundant resources of iron ore. It has the largest reserve of iron ore in Asia.
- About 95 per cent of total reserves of iron ore is located in the states of Odisha, Jharkhand, Chhattisgarh, Karnataka, Goa, Andhra Pradesh and Tamil Nadu.
- Manganese is an important raw material for smelting of iron ore and also used for manufacturing ferrous alloys.
- Odisha is the leading producer of manganese. Major mines in Odisha are located in the central part of the iron ore belt of India, particularly in Bonai, Kendujhar, Sundergarh, Gangpur, Koraput, Kalahandi and Bolangir.
- India is poorly endowed with non-ferrous metallic minerals except bauxite.
- Bauxite is the ore which is used in manufacturing of aluminium. Bauxite is found mainly in tertiary deposits and is associated with laterite rocks occurring extensively either on the plateau or hill ranges of peninsular India and also in the coastal tracts of the country.
- Copper is an indispensable metal in the electrical industry for making wires, electric motors, transformers



and generators. It is alloyable, malleable and ductile. It is also mixed with gold to provide strength to jewellery.

- The copper deposits mainly occur in Singhbhum district in Jharkhand, Balaghat district in Madhya Pradesh and Jhunjhunu and Alwar districts in Rajasthan.
- Among the non-metallic minerals produced in India, mica is the important one. The other minerals extracted for local consumption are limestone, dolomite and phosphate.
- Mica is mainly used in the electrical and electronic industries. It can be split into very thin sheets which are tough and flexible.
- Mica in India is mainly found in Jharkhand, Andhra Pradesh and Rajasthan followed by Tamil Nadu, West Bengal and Madhya Pradesh.

## Topic-2 Distribution of Minerals in India

Minerals are generally concentrated in three broad belts in India. There may be some sporadic occurrences here and there in isolated pockets.

• **The North-Eastern Plateau Region:** This belt covers Chotanagpur (Jharkhand), Odisha Plateau, West Bengal and parts of Chhattisgarh. It has variety of minerals, viz. iron ore, coal, manganese, bauxite, mica.

• **The South-Western Plateau Region:** This belt extends over Karnataka, Goa and contiguous Tamil Nadu uplands and Kerala. This belt is rich in ferrous metals and bauxite. It also contains high grade iron ore, manganese and limestone. This belt does not have as diversified mineral deposits as the north-eastern belt. Kerala has deposits of monazite and thorium, bauxite clay. Goa has iron ore deposits.

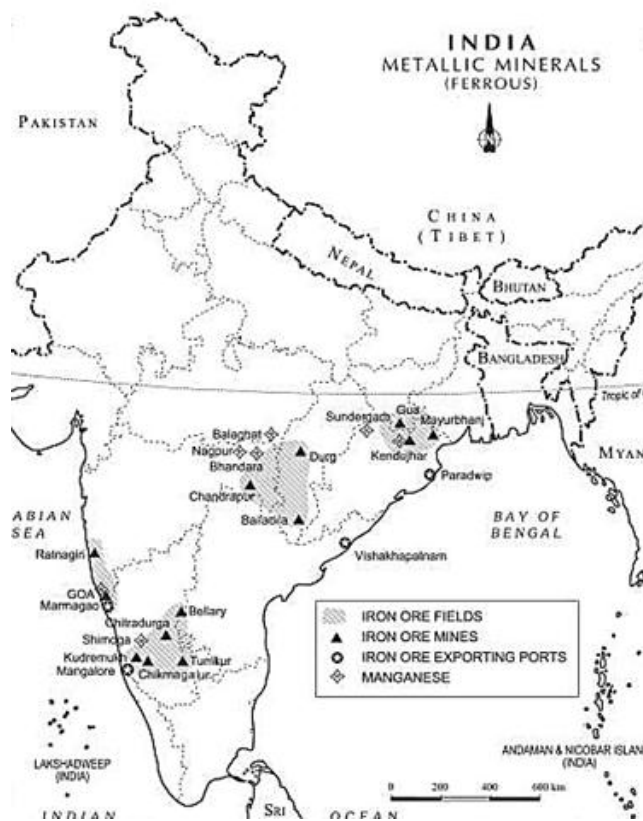
• **The North-Western Region:** This belt extends along Aravali in Rajasthan and part of Gujarat and minerals are associated with Dharwar system of rocks. Copper, zinc have been major minerals. Rajasthan is rich in building stones, i.e., sandstone, granite, marble. Gujarat is known for its petroleum deposits. Gujarat and Rajasthan both have rich sources of salt. The Himalayan belt is another mineral belt where copper, lead, zinc, cobalt and tungsten are known to occur. Assam valley has mineral oil deposits. Besides oil resources are also found in off-shore-areas near Mumbai Coast (Mumbai High).

### Iron Ore

India is endowed with fairly abundant resources of iron ore. It has the largest reserve of iron ore in Asia. The two main types of ore found in our country are haematite and magnetite. It has great demand in international market due to its superior quality. The iron ore mines occur in close proximity to the coal fields in the north-eastern plateau region of the country which adds to their advantage.

The total reserves of iron ore in the country were about 20 billion tonnes in the year 2004-05. About 95 per cent of total reserves of iron ore is located in the States of Orissa, Jharkhand, Chhattisgarh, Karnataka, Goa, Andhra Pradesh and Tamil Nadu. In Orissa, iron ore occurs in a series of hill ranges in Sundergarh, Mayurbhanj and Jhar. The important mines are Gurumahisani, Sulaipet, Badampahar (Mayurbhanj), Kiruburu (Kendujhar) and Bonai (Sundergarh). Similar hill ranges, Jharkhand has some of the oldest iron ore mines and most of the iron and steel plants are located around them. Most of the important mines such as Noamundi and Gua are located in Poorbi and Pashchimi Singhbhum districts. This belt further extends to Durg, Dantewara and Bailadila. Dalli, and Rajhara in Durg are the important mines of iron ore in the country. In Karnataka, iron ore deposits occur in Sandur-Hospet area of Bellary district, Baba Budan hills and

Kudremukh in Chikmagalur district and parts of Shimoga, Chitradurg and Tumkur districts. The districts of Chandrapur, Bhandara and Ratnagiri in Maharashtra, Karimnagar, Warangal, Kurnool, Cuddapah and Anantapur districts of Andhra Pradesh, Salem and Nilgiris districts of Tamil Nadu are other iron mining regions. Goa has also emerged as an important producer of iron ore.



India – Metallic Minerals (Ferrous)

### Manganese

Manganese is an important raw material for smelting of iron ore and also used for manufacturing ferro alloys. Manganese deposits are found in almost all geological formations, however, it is mainly associated with Dharwar system.

Orissa is the leading producer of Manganese. Major mines in Orissa are located in the central part of the iron ore belt of India, particularly in Bonai, Kendujhar, Sundergarh, Gangpur, Koraput, Kalahandi and Bolangir. Karnataka is another major producer and here the mines are located in Dharwar, Bellary, Belgaum, North Canara, Chikmagalur, Shimoga, Chitradurg and Tumkur. Maharashtra is also an important producer of manganese which is mined in Nagpur, Bhandara and Ratnagiri districts. The disadvantage to these mines is that they are located far from steel plants. The manganese belt of Madhya Pradesh extends in a belt in Balaghat-Chhindwara-Nimar-Mandla and Jhabua districts.

Andhra Pradesh, Goa, and Jharkhand are other minor producers of manganese.

### Non-Ferrous Minerals

India is poorly endowed with non-ferrous metallic minerals except bauxite.

#### Bauxite

Bauxite is the ore which is used in manufacturing of aluminium. Bauxite is found mainly in tertiary deposits and is associated with laterite rocks occurring extensively either on the plateau or hill ranges of peninsular India and also in the coastal tracts of the country.

Orissa happens to be the largest producer of Bauxite. Kalahandi and Sambalpur are the leading producers. The other two areas which have been increasing their production are Bolangir and Koraput. The patlands of Jharkhand in Lohardaga have rich deposits. Gujarat, Chhattisgarh, Madhya Pradesh and Maharashtra are other major producers. Bhavanagar, Jamnagar in Gujarat have the major deposits. Chhattisgarh has bauxite deposits in Amarkantak plateau while Katni-Jabalpur area and Balaghat in M.P. have important deposits of bauxite. Kolaba, Thane, Ratnagiri, Satara, Pune and Kolhapur in Maharashtra are important producers. Tamil Nadu, Karnataka and Goa are minor producers of bauxite.

### Copper

Copper is an indispensable metal in the electrical industry for making wires, electric motors, transformers and generators. It is alloyable, malleable and ductile. It is also mixed with gold to provide strength to jewellery. The Copper deposits mainly occur in Singhbhum district in Jharkhand, Balaghat district in Madhya Pradesh and Jhunjhunu and Alwar districts in Rajasthan. Minor producers of Copper are Agnigundala in Guntur District (Andhra Pradesh), Chitradurg and Hasan districts (Karnataka) and South Arcot district (Tamil Nadu).

### Non-metallic Minerals

Among the non-metallic minerals produced in India, mica is the important one. The other minerals extracted for local consumption are limestone, dolomite and phosphate.

### Mica

Mica is mainly used in the electrical and electronic industries. It can be split into very thin sheets which are tough and flexible. Mica in India is produced in Jharkhand, Andhra Pradesh and Rajasthan followed by Tamil Nadu, West Bengal and Madhya Pradesh. In Jharkhand high quality mica is obtained in a belt extending over a distance of about 150 km, in length and about 22 km, in width in lower Hazaribagh plateau. In Andhra Pradesh. Nellore district produces the best quality mica. In Rajasthan mica belt extends for about 320 kms from Jaipur to Bhilwara and around Udaipur. Mica deposits also occur in Mysore and Hasan districts of Karnataka, Coimbatore, Tiruchirapalli, Madurai and Kanniyakumari in Tamil Nadu, Alleppey in Kerala, Ratnagiri in Maharashtra, Purulia and Bankura in West Bengal.

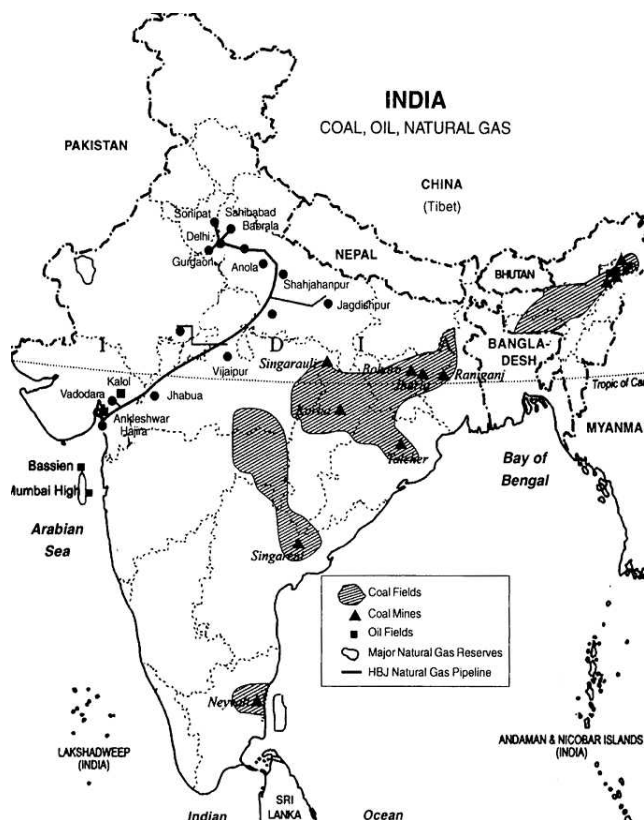


India – Minerals (Non-Ferrous)

## Topic-3 Types of Energy Resources: Conventional, Non-Conventional Resources

Mineral fuels are essential for generation of power, required by agriculture, industry, transport and other sectors of the economy. Mineral resources can be divided into: conventional and non-conventional resources.

- Coal is one of the important minerals which is mainly used in the generation of thermal power and smelting of iron ore. Coal occurs in rock sequences mainly of two geological ages, namely Gondwana and tertiary deposits. About 80 per cent of the coal deposits in India is of bituminous type and is of non-coking grade.
- Jharia is the largest coal field followed by Raniganj. The other river valleys associated with coal are Godavari, Mahanadi and Sone.
- The most important coal mining centres are Singrauli in Madhya Pradesh (part of Singrauli coal field lies in Uttar Pradesh), Korba in Chhattisgarh, Talcher and Rampur in Odisha, Chanda–Wardha, Kamptee and Bander in Maharashtra and Singareni and Pandur in Andhra Pradesh.
- Besides, the brown coal or lignite occur in the coastal areas of Tamil Nadu, Pondicherry, Gujarat and Jammu Kashmir.
- Petroleum is an essential source of energy for all internal combustion engines in automobiles, railways and aircraft.
- Its numerous by-products are processed in petrochemical industries such as fertiliser, synthetic rubber, synthetic fibre, medicines, vaseline, lubricants, wax, soap and cosmetics.
- Oil exploration and production was systematically taken up after the Oil and Natural Gas Commission was set up in 1956.
- Digboi in Assam was the only oil producing region but the scenario has changed after 1956.



- In recent years, new oil deposits have been found at the extreme western and eastern parts of the country.
- The major oil fields of Gujarat are Ankaleshwar, Kalol, Mehsana, Nawagam, Kosamba and Lunej. Mumbai High which lies 160 km off Mumbai was discovered in 1973 and production commenced in 1976.
- The Gas Authority of India Limited was set up in 1984 as a public sector undertaking to transport and market natural gas.
- Exclusive reserves of natural gas have been located along the eastern coast (Tamil Nadu, Odisha and Andhra Pradesh), as well as Tripura, Rajasthan and off-shore wells in Gujarat and Maharashtra.
- Nuclear energy has emerged as a viable source in recent times. Important minerals used for the generation of nuclear energy are uranium and thorium.
- Uranium deposits occur in the Dharwar rocks. The important nuclear power projects are Tarapur (Maharashtra), Rawatbhata near Kota (Rajasthan), Kalpakkam (Tamil Nadu), Narora (Uttar Pradesh), Kaiga (Karnataka) and Kakrapar (Gujarat).
- Sun rays tapped in photovoltaic cells can be converted into energy, known as solar energy.
- Solar thermal technology has some relative advantages over all other non-renewable energy sources.
- The western part of India mainly in Gujarat and Rajasthan has greater potential for the development of solar energy.
- Wind energy is absolutely pollution free, inexhaustible source of energy.
- The kinetic energy of wind, through turbines is converted into electrical energy.
- India, already has started generating wind energy. The Ministry of Non-Conventional Sources of Energy is developing wind energy in India to lessen the burden of oil import bill.
- In Rajasthan, Gujarat, Maharashtra and Karnataka, favourable conditions for wind energy exist. Wind power plant at Lamba in Gujarat in Kachchh is the largest in Asia. Another, wind power plant is located at Tuticorin in Tamil Nadu.
- Geothermal energy is now considered to be one of the

key energy sources which can be developed as an alternate source.

- In India, a geothermal energy plant has been commissioned at Manikaran in Himachal Pradesh.
- Bio-energy refers to energy derived from biological products which includes agricultural residues, municipal, industrial and other wastes.
- Bio-energy is a potential source of energy conversion. It can be converted into electrical energy, heat energy or gas for cooking. It will also process the waste and garbage and produce energy.
- One such project converting municipal waste into energy is Okhla in Delhi.

## Topic-4 Conservation of Mineral Resources

- Traditional methods of resource use result into generating enormous quantity of waste as well as create other environmental problems.
- Hence, for sustainable development calls for the protection of resources for the future generations. There is an urgent need to conserve the resources.
- The alternative energy sources like solar power, wind, wave, geothermal energy are inexhaustible resource.
- In case of metallic minerals, use of scrap metals will enable recycling of metals. Use of scrap is specially significant in metals like copper, lead and zinc in which India's reserves are meagre.
- Use of substitutes for scarce metals may also reduce their consumption.
- Export of strategic and scarce minerals must be reduced, so that the existing reserve may be used for a longer period.

**Important Terms Metamorphic rocks:** They are the rocks which arise from the formation of existing rocks types, in a process called metamorphism, which mean 'Change in form.'

**Minerals resources:** Mineral resources can be defined as homogenous, naturally occurring, inorganic materials that are of economic interest in or on the crust of the Earth. **Metallic minerals:** Metallic minerals are the minerals which can be melted to obtain new product. **Non-metallic minerals:** Non-metallic minerals are minerals that have no metallic lustre and break easily. They are inorganic in origin and are derived from the buried animal and plant life. **Ferrous minerals:** Ferrous minerals are minerals which contain iron. They have very small amount of other metals added. **Non-ferrous minerals:** Non-ferrous metals are those which do not contain iron.

**Metallurgical industry:** Industry which is involved in the production of metal from ore. **Smelting:** It means extracting metal from its ore by a process involving heating and melting.

**Ore:** It is defined as a naturally occurring solid material from which a metal or valuable mineral can be extracted.

**Indispensable:** It means something which is absolutely necessary.

**Crude petroleum:** It is the unrefined petroleum product.

**Nuclear energy:** Nuclear energy is the energy released during a nuclear reaction as a result of fission or fusion.

**Inexhaustible source of energy:** It is a source of energy which will never get depleted. **Geothermal energy:** It is the heat energy generated and stored in Earth. **Bio-energy:** It refers to energy derived from biological products which includes agricultural residues, municipal, industrial and other wastes.

**Important Terms Conserve:** To preserve. **Export:** To be sold abroad. **Know the Facts** Petroleum is extracted from the earth and in its original form, it is thick and black liquid. Saudi Arabia is the largest producer of oil in the world. Solar energy is a completely free source of energy and it is found in abundance. Agriculture and horticulture make maximum use of solar energy. Wind energy is one of the cleanest and safest method of generating renewable energy. According to 2010 survey, 24 countries around the world are using geothermal energy to generate electricity. In some parts of Iceland, hot water runs from geothermal power plants under pavements and roads to help melt ice. The top producers of bauxite have



enough reserves for many years of continued production, with some having reserves lasting 100 years.

## Chapter 8 Manufacturing Industries

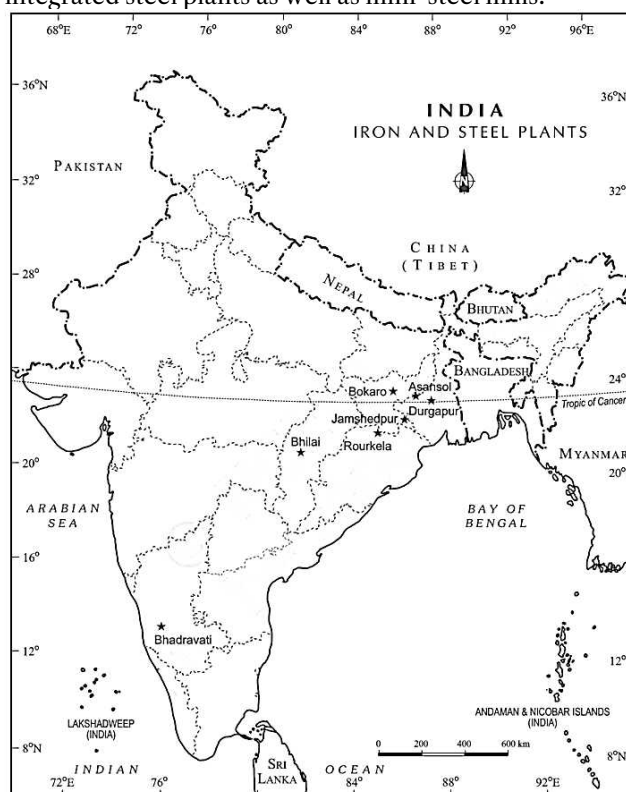
### Topic-1 Types of Industries, Location of Industries

- In modern times industries have become very important part of an economy. They provide employment to large population and contribute significantly in total national wealth/income.
- Industries are classified in a number of ways. On the basis of size, capital investment and labour force employed, industries are classified as large, medium, small scale, and cottage industries.
- On the basis of ownership, industries are categorised as: (i) public sector, (ii) private sector, and (iii) joint and cooperative sector.
- Industries are also classified on the basis of the use of their products such as: (i) basic goods industries, (ii) capital goods industries (iii) intermediate goods industries, and (iv) consumer goods industries.
- Another method of classifying industries is on the basis of raw materials used by them. Accordingly, these can be: (i) agriculture-based industries, (ii) forest-based industries, (iii) mineral-based industries, and (iv) industrially processed raw material-based industries.
- Another common classification of industries is based on the nature of the manufactured products. Eight classes of industries, thus identified are: (i) Metallurgical Industries, (ii) Mechanical Engineering Industries, (iii) Chemical and Allied Industries, (iv) Textile Industries, (v) Food Processing Industries, (vi) Electricity Generation, (vii) Electronics and (viii) Communication Industries.
- Location of industries is influenced by several factors like access to raw materials, power, market, capital, transport and labour, etc.
- **Transport costs**, to a great extent, depend on the nature of raw materials and manufactured products. The locations of pulp industry, copper smelting and pig iron industries are located near their raw materials. In iron and steel industries, iron ore and coal both are weight-losing raw materials. Therefore, an optimum location for iron and steel industries should be near raw material sources.
- **Power** provides the motive force for machines, and therefore, its supply has to be ensured before the location of any industry.
- **Markets** provide the outlets for manufactured products. Heavy machine, machine tools, heavy chemicals are located near the high demand areas as these are market-orientated.
- Petroleum refineries are also located near the markets as the transport of crude oil is easier and several products derived from them are used as raw material in other industries. Ports also play a crucial role in the location of oil refineries. All major industrial plants are located on the trunk rail routes.
- Industries require skilled labour. In India, labour is quite mobile and is available in large numbers due to our large population.
- Historical factors play an important role in the location of industries.
- Industrial policies also play an important role in the establishment of industries.

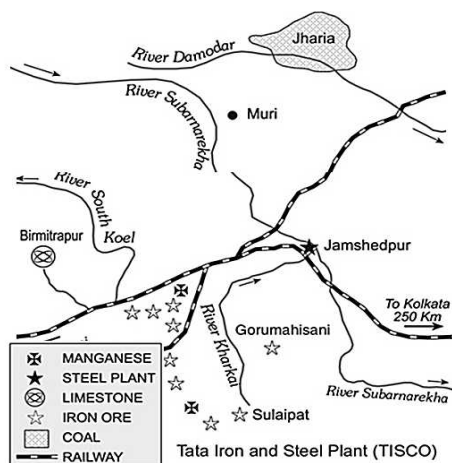
### Topic-2 Major Industries: The Iron and

## Steel Industry, Cotton Industry, Sugar Industry, Petrochemical Industry and Knowledge Based Industry

- The iron and steel industry is basic to the industrial development of any country. The cotton textile industry is one of our traditional industries. The sugar industry is based on local raw materials which prospered even in the British period.
- Almost all sectors of the Indian industry depend heavily on the iron and steel industry for their basic infrastructure.
- In India, there is a crescent-shaped region comprising parts of Chhattisgarh, northern Odisha, Jharkhand and western West Bengal, which is extremely rich in high grade iron-ore, good quality coking coal and other supplementing raw materials.
- The Indian iron and steel industry consists of large integrated steel plants as well as mini-steel mills.



- The Tata Iron and Steel plant (TISCO) lies very close to the Mumbai-Kolkata railway line and about 240 km away from Kolkata, which is the nearest port for the export of steel.
- The Indian Iron and Steel Company (IISCO) set up its first factory at Hirapur and later on another at Kulti. Unfortunately, steel production from IISCO fell considerably in 1972-73 and the plants were taken over by the government.
- The third integrated steel plant, the Visvesvaraya Iron and Steel Works, initially called the Mysore Iron and Steel Works, is located close to an iron-ore producing area of Kemangundi in the Bababudan hills.
- The Rourkela Steel Plant was set up in 1959 in the Sundargarh district of Odisha in collaboration with Germany. This plant has a unique locational advantage, as it receives coal from Jharia (Jharkhand) and iron-ore from Sundargarh and Kendujhar. The Hirakud Project supplies power for the electric furnaces and water is obtained from the Koel and Sankh rivers.



- The Bhilai Steel Plant was established with Russian collaboration in Durg district of Chhattisgarh and started production in 1959.
- Durgapur Steel Plant, in West Bengal, was set up in collaboration with the government of the United Kingdom and started production in 1962. This plant lies in Raniganj and Jharia coal belt and gets iron-ore from Noamundi.
- The Bokaro Steel Plant was set up in 1964 at Bokaro with Russian collaboration. This plant was set up on the principle of transportation cost minimisation by creating Bokaro-Rourkela combine.
- The Vizag Steel Plant, in Vishakhapatnam in Andhra Pradesh is the first port-based plant which started operating in 1992. Its port location is of advantage.
- The Vijaynagar Steel Plant at Hospet in Karnataka was developed using indigenous technology. This uses local iron-ore and limestone. The Salem Steel Plant in Tamil Nadu was commissioned in 1982.
- **The cotton textile industry** is one of the traditional industries of India. India was famous worldwide for the production of muslin, a very fine variety of cotton cloth, calicos, chintz and other different varieties of fine cotton cloth.
- Initially, the British did not encourage the development of the indigenous cotton textile industry. They exported raw cotton to their mills in Manchester and Liverpool and brought back the finished products to be sold in India. In 1854, the first modern cotton mill was established in Mumbai.
- Raw cotton used to be brought to Mumbai port to be transported to England. Therefore, cotton was available in Mumbai city itself. Subsequently, two more mills, the Shahpur Mill and the Calico Mill were established in Ahmedabad.
- The cotton textile industry in India can be broadly divided into two sectors, the organised sector and the decentralised sector.
- Cotton is a "pure" raw material which does not lose weight in the manufacturing process.
- After the first mills were set up in Mumbai and Ahmedabad in the second half of the nineteenth century, the cotton textile industry expanded very rapidly. After 1921, with the development of the railway network other cotton textile centres expanded rapidly.
- In central India, Nagpur, Indore, Solapur and Vadodara became cotton textile centres. Cotton textile mills were set up at Kanpur based on local investment.
- Mills were also set up at Kolkata due to its port facilities. The development of hydroelectricity also favoured the location of the cotton textile mills away from the cotton producing areas.
- Tamil Nadu has the largest number of mills and most of

them produce yarn rather than cloth. Coimbatore has emerged as the most important centre with nearly half the mills located there.

- Production of cotton cloth increased almost five times from 1950-51 to 1999-2000. Cotton textile has been facing tough competition from synthetic cloth.
- **The sugar industry** is the second most important agro-based industry in the country. India is the largest producer of both sugarcane and cane sugar and contributes about 8 per cent of the total sugar production in the world. This industry provides employment for more than 4 lakh persons directly and a large number of farmers indirectly.
- Maharashtra has emerged as a leading sugar producer in the country and produces more than one-third of the total production of the sugar in the country.
- Uttar Pradesh is the second largest producer of sugar. The sugar factories are concentrated in two belts – the Ganga-Yamuna doab and the tarai region.
- In Tamil Nadu, sugar factories are located in Coimbatore, Vellore, Tiruvanamalai, Villupuram and Tiruchchirappalli districts.
- The other states which produce sugar are Bihar, Punjab, Haryana, Madhya Pradesh and Gujarat.
- **Petrochemical industries** has been growing very fast in India. A variety of products come under this category of industries. Many items are derived from crude petroleum, which provide raw materials for many new industries, these are collectively known as petrochemical industries.
- This group of industries is divided into four sub-groups: (i) polymers, (ii) synthetic fibres, (iii) elastomers, and (iv) surfactant intermediate. Mumbai is the hub of the petrochemical industries.
- The advancement in information technology has had a profound influence on the country's economy. Indian **software industry** has emerged as one of the fastest growing sectors in the economy. The IT software and services industry account for almost 2 per cent of India's GDP. India's software industry has achieved a remarkable distinction for providing quality products. A large number of Indian software companies have acquired international quality certification. A major impact of the growth of the knowledge based industries has been an employment creation, which is almost doubled every year.

### Topic-3 Liberalization, Privatization, Globalization (LPG) and Industrial Development in India

- The new Industrial Policy was announced in 1991.
- The major objectives of this policy were to build on the gains already made, correct the distortions or weaknesses that have crept in, maintain a sustained growth in productivity and gainful employment and attain international competitiveness.
- The policy has three main dimensions: liberalisation, privatisation and globalisation.
- In the new industrial policy, Foreign Direct Investment (FDI) has been seen as a supplement to the domestic investment for achieving a higher level of economic development.
- FDI benefits the domestic industry as well as the consumers by providing technological upgradation, access to global managerial skills and practices, optimum use of natural and human resources, etc.
- The industrial policy has been liberalised to attract private investor both domestic and multinationals
- There has been a big gap between approved and actual

foreign direct investment, even though the numbers of foreign collaborations are increasing.

- Globalisation means integrating the economy of the country with the world economy.
- The thrust of globalisation has been to increase the domestic and external competition through extensive application of market mechanism and facilitating dynamic relationship with the foreign investors and suppliers of technology.
- Globalisation has led to the opening of the economy to foreign direct investment by providing facilities to foreign companies to invest in different fields of economic activity in India.
- It also means removing restrictions and obstacles to the entry of multinational companies in India. It also means allowing Indian companies to enter into foreign collaboration in India and also encouraging them to set up joint ventures abroad; carrying out massive import liberalisation programmes by switching over from quantitative restrictions to tariffs in the first place, and then bringing down the level of import duties considerably.

#### Topic-4 Industrial Regions in India

##### Industrial Regions in India

Industries are not evenly distributed in the country. They tend to concentrate on certain locations because of the favourable locational factors.

##### Industrial Regions and Districts

##### Major Industrial Regions (8)

1. Mumbai-Pune Region,
2. Hugli Region,
3. Bangalore-Tamil Nadu Region,
4. Gujarat Region,
5. Chotanagpur Region,
6. Vishakhapatnam-Guntur Region,
7. Gurgaon-Delhi-Meerut Region,
8. Kollam-Thiruvananthapuram Region.

##### Minor Industrial Regions (13)

1. Ambala-Amritsar,
2. Saharanpur-Muzaffarnagar-Bijnor,
3. Indore-Dewas-Ujjain,
4. Jaipur-Ajmer,
5. Kolhapur-South Kannada,
6. Northern Malabar,
7. Middle Malabar,
8. Adilabad-Nizamabad,
9. Allahabad-Varanasi-Mirzapur,
10. Bhojpur-Munger,
11. Durg-Raipur,
12. Bilaspur-Korba,
13. Brahmaputra valley.

##### Industrial Districts (15)

1. Kanpur,
2. Hyderabad,
3. Agra,
4. Nagpur,
5. Gwalior,
6. Bhopal,
7. Lucknow,
8. Jalpaiguri,
9. Cuttack,
10. Gorakhpur,
11. Aligarh,
12. Kota,
13. Purnia,
14. Jabalpur,
15. Bareilly.

Several indices are used to identify the clustering of industries, important among them are: (i) the number of industrial units, (ii) number of industrial workers, (iii) quantum of power used for industrial purposes, (iv) total industrial output, and (v) value added by manufacturing, etc.

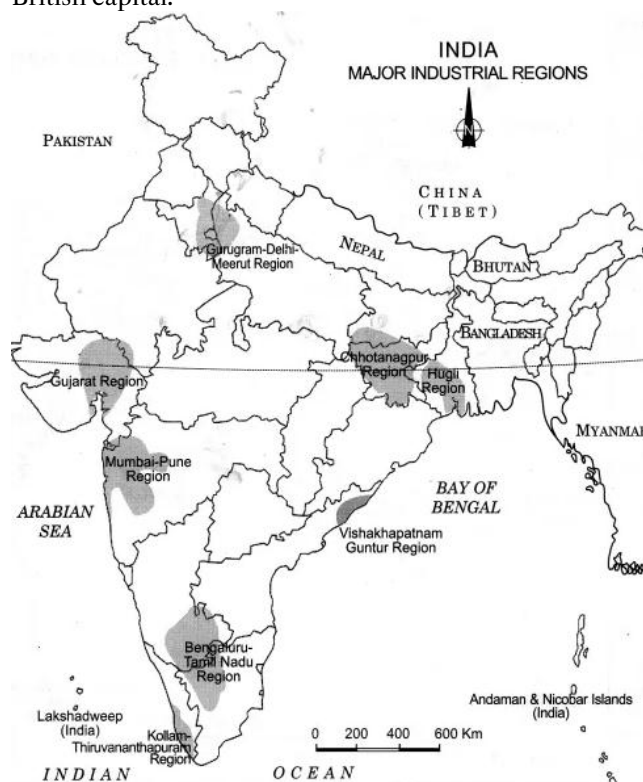
Industries are not evenly distributed in the country. They tend to concentrate on certain locations because of the favourable locational factors.

• **Mumbai-Pune Industrial Region:** It extends from Mumbai-Thane to Pune and in adjoining districts of Nashik and Solapur. Besides, industrial development has been rapid in Kolaba, Ahmednagar, Satara, Sangli and Jalgaon districts.

• Besides, engineering goods, petroleum refining, petrochemicals, leather, synthetic and plastic goods, drugs, fertilisers, electrical, shipbuilding, electronics, software, transport equipments and food industries also developed.

• **Hugli Industrial Region:** Located along the Hugli river, this region extends from Bansberia in the north to Birlanagar in the south for a distance of about 100 km.

- Historical, geographical, economic and political factors have contributed much to its development. It was developed with the opening of river port on Hugli.
- Kolkata emerged as a leading centre of the country.
- Cheap labour available from thickly populated part of Bihar, eastern Uttar Pradesh and Odisha also contributed to its development. Kolkata, being the capital city of British India (1773-1911), attracted the British capital.



• **Bangaluru-Chennai Industrial Region:** This region witnessed most rapid industrial growth in post-Independence period. Till 1960, industries were confined to Bangaluru, Salem and Madurai districts but now they have spread over all the districts of Tamil Nadu except Viluppuram.

• Several heavy engineering industries converged at Bangaluru. Aircraft (HAL), machine tools, telephone (HTL) and Bharat Electronics are industrial landmarks of this region. Important industries are textiles, rail wagons, diesel engines, radio, light engineering goods, rubber goods, medicines, aluminium, sugar, cement, glass, paper, chemicals, film, cigarette, match box, leather goods, etc.

• **Gujarat Industrial Region:** The nucleus of this region lies between Ahmedabad and Vadodara but this region extends upto Valsad and Surat in the south and Jamnagar in the west.

• The discovery of oil fields led to the establishment of petrochemical industries around Ankleshwar, Vadodara and Jamnagar. The port at Kandla helped in the rapid growth of this region. Petroleum refinery at Koyali provided raw materials to a host of petrochemical industries.

• Besides, textiles (cotton, silk and synthetic fabrics) and petrochemical industries, other industries are heavy and basic chemicals, motor, tractor, diesel engines, textile machinery, engineering, pharmaceuticals, dyes, pesticides, sugar, dairy products and food processing.

• **Chotanagpur Region:** This region extends over Jharkhand, northern Odisha and western West Bengal and is known for the heavy metallurgical industries. This region owes its development to the discovery of coal in



the Damodar Valley and metallic and non-metallic minerals in Jharkhand and northern Odisha.

- Densely populated surrounding regions provide cheap labour and Hugli region provides vast market for its industries. Heavy engineering, machine tools, fertilisers, cement, paper, locomotives and heavy electricals are some of the important industries in this region.

- **Vishakhapatnam-Guntur Region:** This industrial region extends from Vishakhapatnam district to Kurnool and Prakasam districts in the south.

- Iron and steel plant at Vishakhapatnam uses the Bailadila iron-ore. Vishakhapatnam, Vijayawada, Vijaynagar, Rajahmundry, Guntur, Eluru and Kurnool are important industrial centres.

- **Gurugram-Delhi-Meerut Region:** Industries located in this region have shown very fast growth in the recent past. Electronics, light engineering and electrical goods are major industries of this region. Besides, there are cotton, woollen and synthetic fabrics, hosiery, sugar, cement, machine tools, tractor, cycle, agricultural implements, chemical and vanaspati industries which have developed on a large scale.

- **Kollam-Thiruvananthapuram Region:** This industrial region is spread over Thiruvananthapuram, Kollam, (Alwaye), Ernakulam and Alappuzha districts. Plantation agriculture and hydropower provide industrial base to this region.

- Cotton textile, sugar, rubber, match box, glass, chemical fertiliser and fish-based industries are important. Food processing, paper, coconut coir products, aluminium and cement industries are also significant.

- Important industrial centres are Kollam, Thiruvananthapuram, Aluva, Kochi, Alappuzha, and Punalur.

**Important Terms** **Raw material:** Unfinished goods.

**Perishable goods:** The goods that decay very soon. **Skilled**

**labour:** A skilled labour is one who has special skills, training and knowledge and ability in their work. **Incentive:** A thing that motivates or encourages someone to do something.

**Privatisation:** It is the process of transferring an enterprise or industry from the public sector to the private sector.

**Globalisation:** It means integrating the economy of the world with the world economy.

## Chapter 9 Planning And Sustainable Development In Indian Context

### Topic-1 Target Area Planning: Hill Areas Development Programme, Drought Prone Area Programme

- The word planning involves the process of thinking, formulation of a scheme or programme and implementation of a set of actions to achieve some goal. Here, it has been used with reference to the process of economic development.

- Generally, there are two approaches to planning, i.e., sectoral planning and regional planning. The sectoral planning means formulation and implementation of the sets of schemes or programmes aimed at development of various sectors of the economy such as agriculture, irrigation, manufacturing, power, construction, transport, communication, social infrastructure and services.

- The uneven pattern of development over space necessitates that the planners have a spatial perspective and draw the plans to reduce regional imbalance in development. This type of planning is termed as

regional planning.

- The planning process has to take special care of those areas which have remained economically backward. But sometimes resource-rich region also remain backward. The economic development also requires technology as well as investment besides the resource. With the planning experience of about one and half decades, it was realised that regional imbalances in economic development were getting accentuated.

- In order to arrest the accentuation of regional and social disparities, the Planning Commission introduced the 'target area' and target group approaches to planning.

- In the 8<sup>th</sup> Five Year Plan special area programmes were designed to develop infrastructure in hill areas, northeastern states, tribal areas and backward areas.

- Hill Area Development Programmes were initiated during Fifth Five Year Plan covering 15 districts comprising all the hilly districts of Uttar Pradesh (present Uttarakhand), Mikir Hill and North Cachar hills of Assam, Darjeeling district of West Bengal and Nilgiri district of Tamil Nadu. These programmes aimed at harnessing the indigenous resources of the hill areas through development of horticulture, plantation agriculture, animal husbandry, poultry, forestry and small-scale and village industry.

- **Drought Prone Area Programme:** This programme was initiated during the Fourth Five Year Plan with the objectives of providing employment to the people in drought-prone areas and creating productive assets. It emphasised on irrigation projects, land development programmes, afforestation, grassland development and creation of basic rural infrastructure such as electricity, roads, market, credit and services.

- Planning Commission of India (1967) identified 67 districts (entire or partly) of the country prone to drought. Irrigation Commission (1972) introduced the criterion of 30 per cent irrigated area and demarcated the drought prone areas.

### Topic-2 Case study: Integrated Tribal Development Project in Bharmaur Region, Indira Gandhi Canal(Nahar) Command Area Revision Note

- **Case Study-Integrated Tribal Development**

- **Project in Bharmaur Region:** Bharmaur tribal area comprises Bharmaur and Holi tehsils of Chamba district of Himachal Pradesh.

- Bharmaur is inhabited by 'Gaddi', a tribal community who have maintained a distinct identity in the Himalayan region as they practised transhumance and conversed through Gaddiali dialect. It is one of the most (economically and socially) backward areas of Himachal Pradesh.

- The economy of this area is largely based on agriculture and allied activities such as sheep and goat rearing.

- The process of development of tribal area of Bharmaur started in 1970s when Gaddis were included among 'scheduled tribes.' Under the Fifth Five Year Plan, the tribal sub-plan was introduced in 1974 and Bharmaur was designated as one of the five Integrated Tribal Development Projects (ITDP) in Himachal Pradesh. This plan laid the highest priority on development of transport and communications, agriculture and allied activities, and social and community services.

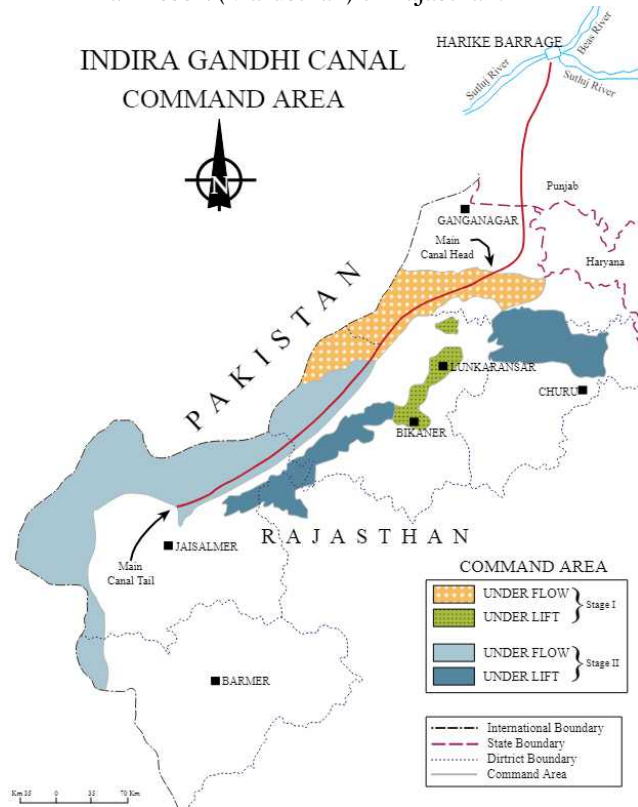
- The most significant contribution of tribal sub-plan in Bharmaur region is the development of infrastructure in terms of schools, healthcare facilities, potable water,

roads, communications and electricity. The social benefits derived from ITDP include tremendous increase in literacy rate, improvement in sex ratio and decline in child marriage.

- Traditionally, the Gaddis had subsistence agricultural-cum pastoral economy having emphasis on foodgrains and livestock production. But during the last three decades of twentieth century, the cultivation of pulses and other cash crops has increased in Bharmaur region. But the crop cultivation is still done with traditional technology.

- Indira Gandhi Canal (Nahar) Command Area:**

Indira Gandhi Canal, previously known as the Rajasthan Canal, is one of the largest canal systems in India. The canal originates at Harike barrage in Punjab and runs parallel to Pakistan border at an average distance of 40 km in Thar Desert (Marusthali) of Rajasthan.



- Out of the total command area, about 70 per cent was envisaged to be irrigated by flow system and the rest by lift system.
- The construction work of the canal system has been carried out through two stages. The command area of Stage-I lies in Ganganagar, Hanumangarh and northern part of Bikaner districts.
- The command area of Stage-II is spread over Bikaner, Jaisalmer, Barmer, Jodhpur, Nagaur and Churu districts covering culturable command area of 14.10 lakh ha.
- The introduction of canal irrigation in this dry land has transformed its ecology, economy and society. It has influenced the environmental conditions of the region both positively as well as negatively.
- The availability of soil moisture for a longer period of time and various afforestation and pasture development programmes under CAD have resulted in greening the land.
- Spread of canal irrigation has led to increase in cultivated area and intensity of cropping. The traditional crops sown in the area, gram, bajra and jowar have been replaced by wheat, cotton, groundnut and rice. This has also caused waterlogging and soil salinity, and thus, in the long run, it hampers the sustainability of agriculture.

### Topic-3 Sustainable Development, Measures for Promotion of Sustainable Development

- The concept of development is dynamic and has evolved during the second half of twentieth century. The notion of sustainable development emerged in the wake of general rise in the awareness of environmental issues in the late 1960s in Western World. It reflected the concern of people about undesirable effects of industrial development on environment.
- Concerned with the growing opinion of world community on the environmental issues, the United Nations established a World Commission on Environment and Development, (WCED) headed by the Norwegian Prime Minister Gro Harlem Brundtland.
- The report defines sustainable development as a “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”
- Sustainable development takes care of ecological, social and economic aspects of development during the present times and pleads for conservation of resources to enable the future generations to use these resources. It takes into account the development of whole human kind which have common future.
- The ecological sustainability of Indira Gandhi Canal Project has been questioned by various scholars. It is a hard fact that attaining sustainable development in the command area requires major thrust upon the measures to achieve ecological sustainability.
- Hence, five of the seven measures proposed are meant to restore ecological balance. (i) The first requirement is strict implementation of water management policy. (ii) In general, the cropping pattern shall not include water intensive crops. (iii) The CAD programmes such as lining of water courses, land development and levelling and Warabandi System (equal distribution of canal water in the command area of outlet) shall be effectively implemented to reduce the conveyance loss of water. (iv) The areas affected by waterlogging and soil salinity shall be reclaimed. (v) The eco-development through afforestation, shelterbelt plantation and pasture development is necessary. (vi) The social sustainability in the region can be achieved only if the land allottees having poor economic background are provided adequate financial and institutional support for cultivation of land. (vii) The agricultural and allied activities have to develop along with other sectors of the economy.

**Important Terms Planning:** It means the process of thinking, formulation of a scheme or programme and implementation of a set of actions to achieve some goal. **Sectoral planning:** The sectoral planning means formulation and implementation of the sets of schemes or programmes aimed at development of various sectors of the economy. **Regional planning:** The regional planning means making the plans to reduce development imbalance in a particular region.

**Implementation:** It means the process of putting a decision or plan into effect and execution. **Infrastructure:** It means the basic physical and organisational structures and facilities.

**Topography:** It is the study of shape and features of the surface of the land such as the mountains, hills, creeks, etc.

**Important Terms Transhumance:** It means moving livestock from one grazing ground to another in a seasonal cycle, typically to lowlands in winter and highlands in summer.

**Fragile:** Delicate. **Subsistence agricultural:** It is the form of farming whose products are intended to provide for the basic needs of the farmer, with little surplus for sale. It brings little or no profit to the farmer, allowing only for a marginal

livelihood. **Pastoralism:** It is the practice of rearing livestock. **Development:** It is an act or process of growing or becoming larger and more advanced. **Bio-physical environment:** The living and non-living features of an environment in which an organism lives is called bio-physical environment. **Gross National Product:** It is an estimate of market value of all the final products and services produced in a given period by the means of production owned by a country's citizens. **Encapsulate:** It means to show the most important facts about something. **Waterlogging:** It means saturation of ground with water. **Soil salinity:** It refers to the salt content in the soil. **Warabandi System:** 'Waranbandi' system means equal distribution of canal water in the command area of outlet. **Know the Facts** Indira Gandhi Canal is the largest canal in India. The Indira Gandhi Canal serves as a strategic line of defence as well. This is because it runs parallel to the border of Pakistan and acts as a barrier in case of conventional warfare. Indira Gandhi Canal uses water released from Pong Dam. Bharmaur is the ancient capital of Chamba district. During winters the temperature in Bharmaur can drop to freezing point.

## Chapter 10 Transport And Communication

### Topic-1 Land Transport

- The use of transport and communication depends upon our need to move things from place of their availability to the place of their use. Human-beings use various methods to move goods, commodities, ideas from one place to another.
- India has one of the largest road networks in the world with a total length of 33.1 lakh km (2005). Road transport is relatively suitable for shorter distance travel.
- For the purpose of construction and maintenance, roads are classified as National Highways (NH), State Highways (SH), Major District Roads and Rural Roads.
- The main roads which are constructed and maintained by the Central Government are known as National Highways. These roads are meant for inter-state transport and movement of defence personal and material in strategic areas. These roads also connect the state capitals, major cities, important ports, railway junctions, etc.
- The National Highways Authority of India (NHAI) was operationalised in 1995. It is an autonomous body under the Ministry of Road Transport and Highways.

#### National Highways Development Projects

NHAI has taken up some major projects in the country under different phases:

**Golden Quadrilateral:** It comprises construction of 5,846 km long 4/6 lane, high density traffic corridor, to connect India's four big metro cities of Delhi-Mumbai-Chennai-Kolkata. With the construction of Golden Quadrilateral, the time- distance and cost of movement among the mega cities of India will be considerably minimised.

**North-South and East-West Corridors:** North-South corridor aims at connecting Srinagar in Jammu and Kashmir with Kaniyakumari in Tamil Nadu (including Kochchi-Salem Spur) with 4,076 km long road. The East-West Corridor has been planned to connect Silchar in Assam with the port town of Porbandar in Gujarat with 3,640 km of road length.

**TABLE 10.1: INDIAN ROAD NETWORK (2005)**

Serial No.	Road Category	Length in Km	% of total road length
1	National Highways	70,934	1.67
2	State	1,54,522	3.64

	Highways		
3	Major District Roads	25,77,396	60.83
4	Rural Roads	1,43,3577	33.86
	<b>Total</b>	<b>4236429</b>	<b>100</b>

- State Highways are constructed and maintained by state governments. They join the state capitals with district headquarters and other important towns. These roads are connected to the National Highways. They constitute 4 per cent of total road length in the country.
  - District Roads are the connecting link between district headquarters and other important nodes in the district. They account for 14 per cent of the total road length of the country.
  - Other roads include Border Roads and International Highways. The Border Road Organisation has constructed roads in high altitude mountainous terrain joining Chandigarh with Manali (Himachal Pradesh) and Leh (Ladakh). This road runs at an average altitude of 4,270 metres above the mean sea level.
  - The international highways are meant to promote the harmonious relationship with the neighbouring countries by providing effective links with India.
  - The distribution of roads is not uniform in the country. The density of road varies from state to state. The density of roads is high in most of the northern states and major southern states. It is low in the Himalayan region, north-eastern region, Madhya Pradesh and Rajasthan.
  - Construction of roads is easy and cheaper in the plain areas while it is difficult and costly in hilly and plateau areas. Therefore, not only the density but also the quality of roads is relatively better in plains as compared to roads in high altitude areas, rainy and forested regions.
  - **Indian Railways network** is one of the longest in the world. Indian Railway was introduced in 1853, when a railway track was constructed from Bombay to Thane covering a distance of 34 km.
  - Indian Railways is the largest government undertaking in the country. The length of Indian Railways network was 66,030 km 31<sup>st</sup> March 2015. After the Independence of the country, railway routes have been extended to other areas too. The most significant development has been the development of Konkan Railway along the western coast providing a direct link between Mumbai and Mangaluru. Railway continues to remain the main means of transport for the masses.
- On the basis of width of the track of Indian Railways, three categories have been made:*
- Broad gauge:** The distance between rails in broad gauge is 1.676 metre. The total length of broad gauge lines is 46,807 km which accounts for 74.14 per cent of the total length of rail routes in the country.
- Metre gauge:** The distance between rails is one metre. It runs over 13,290 km covering 21.02 per cent of the total route length.
- Narrow gauge:** The distance between the rails in this case is 0.762 metre or 0.610 metre. Nearly 4.94 per cent of the total length of the Indian Railways is narrow gauge, which accounts for 3,124 km of route length. It is generally confined to hilly areas.
- Indian Railways has launched extensive programme to convert the metre and narrow gauges to broad gauge. Moreover, steam engines have been replaced by diesel and electric engines. This step has increased the speed as well as the haulage capacity.
- Metro rail has revolutionised the urban transport system in Kolkata and Delhi. replacement of diesel



buses by CNG run vehicles along with introduction of metro is a welcome step towards controlling the air pollution in urban centres.

Railway continues to remain the main means of transport for the masses. Railway network is relatively less dense in the hill states, north eastern states, central parts of India and Rajasthan.

- Pipelines are the most convenient and efficient mode of transporting liquids and gases over long distances.
- Oil India Limited (OIL) under the administrative set up of the Ministry of Petroleum and Natural Gas is engaged in the exploration, production and transportation of crude oil and natural gas. OIL is in the process of constructing of 660 km long pipeline from Numaligarh to Siliguri.

## Topic-2 Water Transport: Inland Waterways, Oceanic Routes

Waterways is an important mode of transport for both passenger and cargo traffic in India. It is the cheapest means of transport and is most suitable for carrying heavy and bulky material.

- The water transport is of two types— (a) inland waterways, and (b) oceanic waterways.
- Inland Waterways: It was the chief mode of transport before the advent of railways. India has 14,500 km of navigable waterways, contributing about 1% to the country's transportation.
- For the development, maintenance and regulation of national waterways in the country, the Inland Waterways Authority was set up in 1986.

### NATIONAL WATERWAYS OF INDIA

Sr	Stretch	Specification
NW 1	Allahabad-Haldia stretch (1,620 km)	It is one of the most important waterways in India, which is navigable by mechanical boats up to Patna and by ordinary boats up to Haridwar. It is divided into three parts for developmental purposes— (i) Haldia-Farakka (560 km), (ii) Farakka-Patna (460 km), (iii) Patna- Allahabad (600 km).
NW 2	Sadiya-Dhubri stretch (891 km)	Brahmaputra is navigable by steamers up to Dibrugarh (1,384 km) which is shared by India and Bangladesh
NW 3	Kottapuram-Kollam stretch (205 km)	It includes 168 km of west coast canal along with Champakara canal (23 km) and Udyogmandal canal (14 km).
NW 4	-	Specified stretches of Godavari and Krishna rivers along with Kakinada-Puducherry stretch of canals (1078 km)
NW 5	-	Specified stretches of river Brahmani along with Matai river, delta channel of Mahanadi and Brahmani rivers and East Coast canals (588 km).

- The backwaters (Kadal) of Kerala has special significance in Inland Waterway. Apart from providing cheap means of transport, they are also attracting large number of tourists in Kerala.
- India has a vast coastline of approximate 7,517 km, including islands.
- Oceanic routes play an important role in the transport sector of India's economy.
- Approximately 95 per cent of India's foreign trade by volume and 70 per cent by value moves through ocean routes. Apart from international trade, these are also

used for the purpose of transportation between the islands and the rest of the country.

## Topic-3 Air Transportation: Air India

Air transport is the fastest means of movement from one place to the other. It is very essential for a vast country like India, where distances are large and the terrain and climatic conditions are diverse.

- Air transport in India made a beginning in 1911. The Airport Authority of India is responsible for providing safe, efficient air traffic and aeronautical communication services in the Indian Air Space.
- The air transport in India is managed by, Air India. Now many private companies have also started passenger services. Air India provides international air services for both passengers and cargo traffic.
- About 52 per cent of the total air traffic was handled only at Mumbai and Delhi airports.
- Pawan Hans is the helicopter service operating in hilly areas and is widely used by tourists in north-eastern sector. In addition, Pawan Hans Limited mainly provides helicopter services to petroleum sector and for tourism.

### Open Sky Policy

*To help the Indian exporters and make their export more competitive, the government had introduced an Open Sky Policy for cargo in April 1992. Under this policy, foreign airlines or association of exporters can bring any freighters to the country.*

## Topic-4 Communication Networks: Personal Communication System, Mass Communication System

- In earlier times, the messages were delivered by beating the drum or hollow tree trunks, giving indications through smoke or fire or with the help of fast runners.
- Invention of post office, telegraph, printing press, telephone, satellite, etc., has made the communication much faster and easier.
- People use different modes of communication to convey their messages. Means of communication can be divided into personal and mass communication. Among all the personal communication system, internet is the most effective and advanced one. It is widely used in urban areas.
- The internet is like a huge central warehouse of data, with detailed information on various items. It enables us with the basic facilities of direct communication.
- Mass communication system: Radio broadcasting started in India in 1923 by the Radio Club of Bombay. Since then, it gained immense popularity and changed the socio-cultural life of people.
- All India Radio broadcasts a variety of programmes related to information, education and entertainment. Special news bulletins are also broadcasted at specific occasions like session of Parliament and state legislatures.
- Television broadcasting has emerged as the most effective audio-visual medium for transmitting information and educating masses.
- Satellites are mode of communication in themselves as well as they regulate the use of other means of communication. On the basis of configuration and purposes, satellite system in India can be grouped into two: Indian National Satellite System (INSAT) and Indian Remote Sensing Satellite System (IRS). India has also developed its own Launching Vehicle PSLV (Polar Satellite Launch Vehicle). The National Remote Sensing Agency (NRSA) at Hyderabad provides facilities for acquisition of data and its processing. These are very

useful in the management of natural resources.

**Important Terms National Highways:** The main roads which are constructed and maintained by the Central Government are known as the National Highways. These roads are meant for inter-state transport and movement of defence personnel and material in strategic areas. **State Highways:** These are constructed and maintained by state governments. They join the state capitals with district headquarters and other important towns. These roads are connected to the National Highways. **District Roads:** These roads are the connecting link between district headquarters and the other important nodes in the district. **International Highways:** The international highways are meant to promote the harmonious relationship with the neighbouring countries by providing effective links with India. **Cargo:** Goods carried on a ship, aircraft or motor vehicles. **Bulky:** Large and difficult to carry. **Advent:** It means invention of something.

**Backwaters:** It is a part of a river not reached by the current, where the water is stagnant. **Creek:** It means narrow, sheltered waterway, especially an inlet in a shoreline of a channel in a marsh.

**Know the Facts Personal communication:** It means have to direct communication. **Mass communication:** It means imparting or exchange of information on a large scale to a wide range of people.

**Know the Facts** The total distance covered by the 14,300 trains on the Indian Railways everyday, equals three and half times the distance to the Moon. The longest platform in the world is at Gorakhpur and is about 4,483 ft in length. The Indian road network is second largest road network in the world. On April 19, 1975, India entered the space age by launching their first ever satellite, the Aryabhata. The longest national highway will be NH-44, running from Srinagar to Kanyakumari. Internet sends approximately 204 million e-mails per minute and 70% of all the e-mails sent are spam.

## Chapter 11 International Trade

### Topic-1 Changing Pattern of the Composition of India's Exports, Changing Pattern of the Composition of India's Import

International trade is mutually beneficial as no country is self-sufficient. India's international trade has undergone a sea change in recent years in terms of volume, composition as well as direction. Although India's contribution in the world trade is as low as 1.6 per cent of the total volume, yet it plays a significant role in the world economy. The nature of India's foreign trade has changed over the years.

- There are numerous reasons for sharp rise in overseas trade, such as, the momentum picked up by the manufacturing sectors, the liberal policies of the government and the diversification of markets.
- Though there has been an increase in the total volume of import and export, the value of import continued to be higher than that of exports. There has also been an increase in trade deficit over the last couple of years. This increase in deficit is attributed to the price rise of crude petroleum which forms a major component of India's import list.

#### *Changing Pattern of the Composition of India's Exports*

Composition of India's Export, 1997-2011 (Percentage share in Exports)

Commodities	1997-98	1999-2000	2000-01	2003-04
<b>Agriculture and allied products</b>	<b>18.93</b>	<b>15.27</b>	<b>13.55</b>	<b>11.8</b>
<b>Ore and Minerals</b>	<b>3.03</b>	<b>2.5</b>	<b>2.62</b>	<b>3.71</b>
<b>Manufactured goods</b>	<b>75.83</b>	<b>80.93</b>	<b>77.9</b>	<b>75.96</b>

<b>Petroleum and crude products</b>	<b>1.01</b>	<b>0.08</b>	<b>4.29</b>	<b>5.59</b>
<b>Other commodities</b>	<b>1.2</b>	<b>1.22</b>	<b>1.64</b>	<b>2.94</b>

In case of exports the share of agriculture and allied products has declined whereas shares of petroleum and crude products and other commodities have increased. The shares of ore minerals and manufactured goods have largely remained constant over the years from 1997-98 to 2003-04. The increase in the share of petroleum products is due to a rise in petroleum prices as well as increase in India's refining capacity. The decline in traditional items is largely due to the tough international competition. Amongst the agricultural products, there is a great decline in the exports of traditional items such as coffee, spices, tea, pulses, etc. though an increase has been registered in floricultural products, fresh fruits, marine products and sugar, etc.

Manufacturing sector alone accounted for 75.96 per cent of India's total value of export in 2003-04. Engineering goods have shown a significant growth in the export list. Textile sector could not achieve much in spite of the liberal measures taken by the government. China and other East Asian countries are our major competitors. Gems and jewellery contributes a larger share of India's foreign trade.

#### *Changing Patterns of the Composition of India's Import*

The composition of commodities in India's international trade has been undergoing a change over the years. India faced serious food shortage during 1950s and 1960s. The major item of import at that time was foodgrains, capital goods, machinery and equipment. The balance of payment was adverse as imports were more than export in spite of all the efforts of import substitution.

- After 1970s, foodgrains import was discontinued due to the success of the Green Revolution. Foodgrains import was replaced by fertilisers and petroleum. Machine and equipment, special steel, edible oil and chemicals largely made the import basket.
- Import of capital goods maintained a steady increase due to rising demand in the export-oriented industrial and domestic sectors.

#### **INDIA COMPOSITION OF IMPORT 2009-11 (IN PERCENTAGE)**

Commodity Group	2009-10	2010-11
Food and allied products	3.7	2.9
Fuel (Coal, POL)	33.2	31.3
Fertilisers	2.3	1.9
Paper board manufacturing and news print	0.5	0.6
Capital goods	15.0	13.1
Others of which	42.6	47.7
Chemicals	(5.2)	(5.2)
Pearls precious and semi precious stones	(5.6)	(9.4)
Gold and silver	(10.3)	(11.5)

- Import of food and allied products declined with a fall in imports of edible oils. Other major items of India's import include pearls and semi-precious stones, gold and silver, metals, ferrous ores and metal scrap, non-ferrous metals, electronic goods, etc.

• The decline in traditional items is largely due to the tough international competition. Amongst the agricultural products, there is a great decline in the exports of traditional items such as coffee, spices, tea, pulses, etc., though an increase has been registered in floricultural products, fresh fruits, marine products and

sugar, etc.

- Engineering goods have shown a significant growth in the export list. Textile sector could not achieve much in spite of the liberal measures taken by the government. China and other East Asian countries are our major competitors. Gems and jewellery contributes a larger share of India's foreign trade.

## Topic-2 Direction of Trade: Seaports as Gateways of International Trade, Airports

- India has trade relations with most of the countries and major trading blocs of the world. It has already started adopting suitable measures such as trade liberalisation, reduction in import duties, delicensing and change from process to product patents.
- The USA is India's largest trading partner and the most important destination of India's export. Other countries in order of significance include the UK, Belgium, Germany, Japan, Switzerland, Hong Kong, the U.A.E., China, Singapore and Malaysia.
- Most of India's foreign trade is carried through sea and air routes. However, a small portion is also carried through land route to neighbouring countries like Nepal, Bhutan, Bangladesh and Pakistan.
- Water provides a convenient route for very cheap transport provided there is no turbulence. An interesting fact about ports in India is that its west coast has more seaports than its east coast.
- There are some ports which have very vast area of influence and some have limited area of influence. At present, India has 12 major ports and 185 minor or intermediate ports.
- The major ports handle larger share of the total traffic. The 12 major ports handle about 75 per cent of the country's oceanic traffic.
- Today, Indian ports are handling large volumes of domestic as well as overseas trade. Most of the ports are equipped with modern infrastructure. The capacity of Indian ports increased from 20 million tonnes of cargo handling in 1951 to more than 500 million tonnes at present.

**Kandla Port** situated at the head of Gulf of Kutch has been developed as a major port to cater to the needs of western and north western parts of the country and also to reduce the pressure at Mumbai port. The port is specially designed to receive large quantities of petroleum and petroleum products and fertiliser. The offshore terminal at Vadinar has been developed to reduce the pressure at Kandla port. Demarcation of the boundary of the hinterland would be difficult as it is not fixed over space. In most of the cases, hinterland of one port may overlap with that of the other.

**Mumbai** is a natural harbour and the biggest port of the country. The port is situated closer to the general routes from the countries of Middle East, Mediterranean countries, North Africa, North America and Europe where the major share of country's overseas trade is carried out. The port is 20 km long and 6-10 km wide with 54 berths and has the country's largest oil terminal. M.P., Maharashtra, Gujarat, U.P. and parts of Rajasthan constitute the main hinterlands of Mumbai ports.

**Jawaharlal Nehru Port** at Nhava Sheva was developed as a satellite port to relieve the pressure at the Mumbai port. It is the largest container port in India.

**Marmagao Port**, situated at the entrance of the Zuari estuary, is a natural harbour in Goa. It gained significance after its remodelling in 1961 to handle iron-

ore exports to Japan. Construction of Konkan railway has considerably extended the hinterland of this port. Karnataka, Goa, Southern Maharashtra constitute its hinterland.

**New Mangalore Port** is located in the state of Karnataka and caters to the needs of the export of iron-ore and iron-concentrates. It also handles fertilisers, petroleum products, edible oils, coffee, tea, wood pulp, yarn, granite stone, molasses, etc. Karnataka is the major hinterland for this port.

**Kochchi Port**, situated at the head of Vembanad Kayal, popularly known as the "Queen of the Arabian Sea," is also a natural harbour. This port has an advantageous location being close to the Suez-Colombo route. It caters to the needs of Kerala, southern-Karnataka and south western Tamil Nadu.

**Kolkata Port** is located on the Hugli river, 128 km inland from the Bay of Bengal. Like the Mumbai port, this port was also developed by the British. Kolkata had the initial advantage of being the capital of British India. The port has lost its significance considerably on account of the diversion of exports to the other ports such as Vishakhapatnam, Paradwip and its satellite port, Haldia.

**Kolkata port** is also confronted with the problem of silt accumulation in the Hugli river which provides a link to the sea. Its hinterland covers U.P., Bihar, Jharkhand, West Bengal, Sikkim and the north-eastern states. Apart from this, it also extends ports facilities to our neighbouring land-locked countries such as Nepal and Bhutan.

**Haldia Port** is located 105 km downstream from Kolkata. It has been constructed to reduce the congestion at Kolkata port. It handles bulk cargo like iron ore, coal, petroleum, petroleum products and fertilisers, jute, jute products, cotton and cotton yarn, etc.

**Paradwip Port** is situated in the Mahanadi delta, about 100 km from Cuttack. It has the deepest harbour specially suited to handle very large vessels. It has been developed mainly to handle large-scale export of iron-ore. Orissa, Chhattisgarh and Jharkhand are the parts of its hinterland.

**Visakhapatnam Port** in Andhra Pradesh is a land-locked harbour, connected to the sea by a channel cut through solid rock and sand. An outer harbour has been developed for handling iron-ore, petroleum and general cargo. Andhra Pradesh is the main hinterland for this port.

**Chennai Port** is one of the oldest ports on the eastern coast. It is an artificial harbour built in 1859. It is not much suitable for large ships because of the shallow waters near the coast. Tamil Nadu and Pondicherry are its hinterland.

**Ennore**, a newly developed port in Tamil Nadu, has been constructed 25 km north of Chennai to relieve the pressure at Chennai port.

**Tuticorin Port** was also developed to relieve the pressure of Chennai port. It deals with a variety of cargo including coal, salt, food grains, edible oils, sugar, chemicals and petroleum products.

- Air transport plays an important role in the international trade. At present, there are 12 international airports and 112 domestic airports functioning in the country. They are— Ahmedabad, Amritsar, Bangaluru, Chennai, Delhi, Goa, Guwahati, Hyderabad, Kochi, Kolkata, Mumbai and Thiruvananthapuram.

**Important Terms Trade deficit:** It refers to the amount by which the cost of a country's imports exceeds the value of its



exports. **Import:** It means to bring goods or services into a country from some other country for sale. **Export:** It means to send goods or services to another country for sale. **Green Revolution:** It refers to the increase in crop production that was achieved by the use of artificial fertilisers, pesticides and high-yield crop varieties. **Industrialisation:** It means development of industries in a country or region on a wide scale. **Coastline:** It means land along the coast. **Port:** It means port. **Port:** A town or city with a harbour or access to navigable water where ships load and unload. **Cargo:** Goods carried on a ship, aircraft or motor vehicle.

**Know the Facts** Did you know that Kandla Port is a tidal port. Haldia Port has a fully equipped containerised berth. Vishakhapatnam Port is the deepest landlocked and protected port.

## Chapter 12 Geographical Perspective On Selected Issues And Problems

### Topic-1 Environmental Pollution: Water Pollution, Air Pollution, Noise Pollution, Urban Waste Disposal

- Environmental pollution results from the release of substances and energy from waste products of human activities.
- Pollution can be classified into (i) air pollution, (ii) water pollution, (iii) land pollution and (iv) noise pollution.

#### TYPES AND SOURCES OF POLLUTION

Pollution Types	Pollution Involved	Sources of Pollution
Air Pollution	Oxides of sulphur (SO <sub>2</sub> , SO <sub>3</sub> ), Oxides of nitrogen, carbon monoxide, hydro-carbon, ammonia, lead, aldehydes asbestos and beryllium.	Combustion of coal, petrol and diesel, industrial processes, solid waste disposal, sewage disposal, etc.
Water Pollution	Odour, dissolved and suspended solids, ammonia and urea, nitrate and nitrites, chloride, fluoride, carbonates, oil and grease, insecticide and pesticide residue, tannin, coliform MPM (bacterial count) sulphates and sulphides, heavy metals e.g. lead, arsenic, mercury, manganese, etc., radioactive substances.	Sewage disposal, urban run-off, toxic effluents from industries, run-off over cultivated lands and nuclear power plants.
Land Pollution	Human and animal excreta viruses and bacteria, garbage and vectors therein, pesticides and fertiliser-residue alkalinity, fluorides, radio-active substances.	Improper human activities, disposal of untreated industrial waste, use of pesticides and fertilisers.
Noise Pollution	High level of noise above tolerance level.	Aircrafts, automobiles, trains, industrial processing and advertising media.

- **Water Pollution:** Indiscriminate use of water by increasing population and industrial expansion has led to degradation of the quality of water considerably.
- Though water pollutants are also created from natural sources (erosion, landslides, decay and decomposition

of plants and animals, etc.) human sources are the real causes of concern. Human beings pollute the water through industrial, agricultural and cultural activities. Among these activities, industry is the most significant contributor.

- Industries produce several undesirable products including industrial wastes, polluted waste water, poisonous gases, chemical residuals, numerous heavy metals, dust, smoke, etc. Most of the industrial wastes are disposed off in running water or lakes. Major water polluting industries are leather, pulp and paper, textiles and chemicals.
- Cultural activities such as pilgrimage, religious fairs, tourism, etc., also cause water pollution.
- Air pollution is taken as addition of contaminants like dust, fumes, gas, fog, odour, smoke or vapour to the air in substantial proportion and duration that may be harmful to flora and fauna and to property. Combustion of fossil fuels, mining and industries are the main sources of air pollution.
- Noise pollution refers to the state of unbearable and uncomfortable to human beings which is caused by noise from different sources.
- The main sources of noise pollution are various factories, mechanised construction and demolition works, automobiles and aircrafts, etc. There may be added periodical but polluting noise from sirens, loudspeakers used in various festivals, programmes associated with community activities.
- In sea traffic, the noise pollution is confined to the harbour due to loading and unloading activities being carried. Industries cause noise pollution but with varying intensity depending upon the type of industry.
- Noise pollution is location specific and its intensity declines with increase in distance from the source of pollution, i.e., industrial areas, arteries of transportation, airport, etc.
- Environmental pollution by solid wastes has now got significance because of enormous growth in the quantity of wastes generated from various sources.
- Solid waste refers to a variety of old and used articles, For example stained small pieces of metals, broken glasswares, plastic containers, polythene bags, ashes, floppies, CDs, etc., dumped at different places.
- Solid wastes cause health hazard through creation of obnoxious smell, and harbouring of flies and rodents, which act as carriers of diseases like typhoid, diphtheria, diarrhoea, malaria and cholera, etc. The dumping of industrial waste into rivers leads to water pollution. River pollution from city-based industries and untreated sewage leads to serious health problems downstream. These wastes should be treated as resource and utilised for generating energy and compost. Untreated wastes ferment slowly and release toxic biogas to the atmosphere, including methane.

### Topic-2 Rural -Urban Migration, Problems of Slums, Land Degradation

- Population flow from rural to urban areas is caused by many factors like high demand for labour in urban areas, less job opportunities in rural areas and unbalanced pattern of development between urban and rural areas.
- Urban centres in India are more differentiated in terms of the socio-economic, politico-cultural and other indicators of development than any other areas.
- Slums are residential areas of the least choice, dilapidated houses, poor hygienic conditions, poor ventilation, lack of basic amenities like drinking water, light and toilet facilities, etc.

- These areas are over-crowded having narrow street pattern prone to serious hazards from fire.
- Moreover, most of the slum population works in low paid, high risk-prone, unorganised sectors of the urban economy.
- Poverty makes them vulnerable to drug abuse, alcoholism, crime, vandalism, escapism, apathy and ultimately social exclusion.
- The pressure on agricultural land increases not only due to the limited availability but also by deterioration of quality of agricultural land. Soil erosion, waterlogging, salinisation and alkalinisation of land lead to land degradation.
- Land degradation is generally understood either as a temporary or a permanent decline in productive capacity of the land.
- Though all degraded land may not be wasteland, but unchecked process of degradation may lead to the conversion to wasteland.
- National Remote Sensing Agency (NRSA) has classified wastelands by using remote sensing techniques and it is possible to categorise these wastelands according to the processes that have created them. There are a few types of wastelands such as gullied /ravineous land, desertic or coastal sands, barren rocky areas, steep sloping land, and glacial areas, which are primarily caused by natural agents.
- There are some other types of wastelands such as degraded shifting cultivation area, degraded land under plantation crops, degraded forests, degraded pastures, and mining and industrial wastelands, are caused by

human activities.

**Important Terms Environmental pollution:** It refers to the pollution resulting from the release of substances and energy from waste products of human activities. **Reservoirs:** A large natural or artificial lake used as a source of water supply.

**Fertilisers:** The chemical or natural substance added to soil or land to increase its fertility. **Pesticides:** The substance used for destroying insects or other organisms harmful for cultivated plants. **Water borne disease:** It refers to water-related diseases. **Smog:** It is the name given to the mixture of smoke and fog in the air. **Acid rain:** It refers to the rainfall that is made so acidic by atmospheric pollution that it causes environmental harm. **Solid waste:** It refers to a variety of old and used articles. **Population:** All the inhabitants of a particular place. **Slums:** Slums are residential areas of the least choice, dilapidated houses, poor hygienic conditions, poor ventilation, lack of basic amenities like drinking water, light and toilet facilities, etc. **Social exclusion:** It refers to exclusion from the prevailing social system and its rights and privileges, typically as a result of poverty. **Waterlogging:** It means saturation of soil with water. **Marshy areas:** It is a type of wetland, an area of land where water covers ground for long periods of time.

**Know the Facts** Dharavi, the slum of Mumbai is the third largest slum in the world. The slum of Dharavi is a major tourist attraction. Nearly one lakh premature deaths in India happen annually due to air pollution. According to WHO, Delhi has surpassed Beijing and is currently the most polluted city in the world. The Ganges is one of the most polluted river in the world. In India, water-borne diseases like diarrhoea alone cause more than 1,600 deaths daily.

# NCERT Class 6

## Polity Social & Political Life I

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 Understanding Diversity

##### DIVERSITY IN INDIA

India is a country of many diversities. We speak different languages, have various types of food, celebrate different festivals, practise different religions. But actually, if you think about it, we do many things that are similar except that we do them in different ways.

##### How do we explain Diversity?

The history of many places shows us how many different cultural influences have helped to shape life and culture there. Regions became very diverse because of their unique histories.

Similarly diversity also comes about when people adapt their lives to the geographical area in which they live. For example living near the sea is quite different from living in a mountainous area.

Not only do people have different clothing and eating habits, but even the kinds of work they do are different. In cities it is often easy to forget how closely people's lives are tied to their physical surroundings. This is because in the city people seldom grow their own vegetables and grain. Instead they depend on the market to buy all the food and other goods that they need. Let us try to understand what we mean when we say that historical and geographical factors influence the diversity of a region. We can do this by reading about life in two different parts of the country, Kerala and Ladakh.

**Ladakh** is a desert in the mountains in the eastern part of Jammu and Kashmir. Very little agriculture is possible here since this region does not receive any rain and is covered in snow for a large part of the year. There are very few trees that can grow in the region. For drinking water, people depend on the melting snow during the summer months.

People here keep sheep and the sheep in this region are special because they produce pashmina wool. This wool is prized and pashmina shawls cost a lot of money. The people in Ladakh carefully collect the wool of the sheep and sell this to traders from Kashmir. Pashmina shawls are chiefly woven in Kashmir.

The people eat meat and milk products like cheese and butter. Each family owns some goats, cows and dzos (yak-cows). Being a desert did not mean that Ladakh did not attract its share of traders. It was considered a good trade route as it had many passes through which caravans travelled to what is today called Tibet. These caravans carried textiles and spices, raw silk and carpets. Buddhism reached Tibet via Ladakh. Ladakh is also called Little Tibet. Islam was introduced in this region more than four hundred years ago and there is a significant Muslim population here. Ladakh has a very rich oral tradition of songs and poems. Local versions of the Tibetan national epic the Kesar Saga are performed

and sung by both Muslims and Buddhists.

**Kerala** is a state in the southwest corner of India. It is surrounded by the sea on one side and hills on the other. A number of spices like pepper, cloves and cardamoms are grown on the hills. It is spices that made this region an attractive place for traders. Jewish and Arab traders were the first to come here. The Apostle of Christ, St. Thomas is believed to have come here nearly 2000 years ago and he is credited with bringing Christianity to India.

Many Arab traders also came and settled down here. Ibn Battuta, who travelled here a little less than seven hundred years ago, wrote a travelogue in which he describes the lives of Muslims and says that they were a highly respected community. The Portuguese discovered the sea route to India from Europe when Vasco da Gama landed with his ship here.

Because of all these various historical influences, people in Kerala practise different religions such as Judaism, Islam, Christianity, Hinduism and Buddhism.

The fishing nets used here look exactly like the Chinese fishing nets and are called cheena-vala. Even the utensil used for frying is called the cheenachatti, and it is believed that the word cheen could have come from China. The fertile land and climate are suited to growing rice and a majority of people here eat rice, fish and vegetables.

While Kerala and Ladakh are quite different in terms of their geographical features, the history of both regions has seen similar cultural influences. Both regions were influenced by Chinese and Arab traders. It was the geography of Kerala which allowed for the cultivation of spices and the special geographical location of Ladakh and its wool that drew traders to these regions. Thus history and geography are often tied in the cultural life of a region.

The influence of diverse cultures is not merely a thing of the past. Our present lives are all about moving from place to place for work and with each move our cultural traditions and way of life slowly become part of the new place we are in. Similarly in our own neighbourhoods we live close to people from several communities. Our daily lives are about the ways in which we do things together and hear stories about each other's lives, customs and traditions.

##### Unity in Diversity

India's diversity has always been recognised as a source of its strength. When the British ruled India, women and men from different cultural, religious and regional backgrounds came together to oppose them. India's freedom movement had thousands of people of different backgrounds in it. They worked together to decide joint actions, they went to jail together, and they found different ways to oppose the British. Interestingly the British thought they could divide Indians because they were so different, and then continue to rule them. But the people showed how they could be different and



yet be united in their battle against the British. This song was sung after the Jallianwala Bagh massacre in Amritsar in which a British general opened fire on a large group of unarmed, peaceful people killing many and wounding even more. Men and women, Hindus, Sikhs and Muslims, rich and poor had gathered to protest against the British. This song was composed and sung to honour the memory of those brave people. Songs and symbols that emerged during the freedom struggle serve as a constant reminder of our country's rich tradition of respect for diversity. Do you know the story of the Indian flag? It was used as a symbol of protest against the British by people everywhere. In his book *The Discovery of India* Jawaharlal Nehru says that Indian unity is not something imposed from the outside but rather, "It was something deeper and within its fold, the widest tolerance of belief and custom was practised and every variety acknowledged and even encouraged." It was Nehru, who coined the phrase, "unity in diversity" to describe the country. India's national anthem, composed by Rabindranath Tagore, is another expression of the unity of India. In what way does the national anthem describe this unity?

**Important Terms** **Diversity:** A range of different people things or ideas. **Incredible:** Unbelievable. **Inequality:** Not equal. **Symbol:** Someone or something that represents a particular quality or idea.

## Chapter 2 Diversity And Discrimination

### Difference and Prejudice

There are many things that make us what we are – how we live, the languages we speak, what we eat, wear, the games we play and the things we celebrate. All of these are influenced both by the geography and history of the place where we live.

*You will get an idea of how diverse India is if you look even briefly at the following statement:* There are eight major religions in the world. Every single one of them is practised in India. We have more than 1600 languages that are people's mother tongue s, and there are more than a hundred dance forms. Yet this diversity is not always celebrated. This is because we feel safe and secure with people who look, talk, dress and think like us.

Prejudice means to judge other people negatively or see them as inferior. When we think that only one particular way is the best and right way to do things we often end up not respecting others, who may prefer to do things differently. For example, if we think English is the best language and other languages are not important, we are judging these other languages negatively. As a result, we might not respect people who speak languages other than English. We can be prejudiced about many things: people's religious beliefs, the colour of their skin, the region they come from, the accent they speak in, the clothes they wear etc. Often, our prejudices about others are so strong that we don't want to form friendships with them. At times, we may even act in ways that hurt them.

### Creating Stereotypes

When we fix people into one image we create a stereotype. When people say that those who belong to a particular country, religion, sex, race or economic background are "stingy," "lazy," "criminal" or "dumb," they are using stereotypes. There are stingy and generous people everywhere, in every country, in every religion, in every group whether rich or poor, male or

female. And just because some people are like that it is not fair to think that everyone will be the same. Stereotypes stop us from looking at each person as a unique individual with his or her own special qualities and skills that are different from others. They fit large numbers of people into only one pattern or type. Stereotypes affect all of us as they prevent us from doing certain things, that we might otherwise be good at.

### Inequality and Discrimination

Discrimination happens when people act on their prejudices or stereotypes. If you do something to put other people down, if you stop them from taking part in certain activities and taking up jobs, or stop them from living in certain neighbourhoods, prevent them from taking water from the same well or hand pump, or not allow them to drink tea in the same cups or glasses as others, you are discriminating against them.

Example: A common stereotype about Muslims is that they are not interested in educating girls and therefore do not send girls to school. However, studies have now shown that poverty amongst Muslims is an important reason why Muslim girls do not attend school or drop out from school after a few years. Wherever effort has been made to reach education to the poor, there the Muslim community has shown an interest in sending their girls to school. Therefore, poverty, not religion, is the cause for non-attendance of Muslim girls in school. Some people may experience both kinds of discrimination. They are poor and they belong to groups whose culture is not valued. Tribals, some religious groups and even particular regions, are discriminated against for one or more of these reasons. In the following section we will look at how a famous Indian was discriminated against. This will help us understand the ways in which caste was used to discriminate against large numbers of people.

### On being discriminated against

People are engaged in different kinds of work like teaching, carpentry, pottery, weaving, fishing, farming etc. to earn a livelihood. However, certain kinds of work are valued more than others. Activities like cleaning, washing, cutting hair, picking garbage are seen as tasks that are of less value and people who do this work are seen as dirty or impure. This belief is an important aspect of the caste system. In the caste system, communities/ groups of people were placed in a sort of ladder where each caste was either above or below the other. Those who placed themselves at the top of this ladder called themselves upper caste and saw themselves as superior. The groups who were placed at the bottom of the ladder were seen as unworthy and called "untouchables".

Dalit is a term that people belonging to so-called lower castes use to address themselves. They prefer this word to 'untouchable'. Dalit means those who have been 'broken'. This word according to Dalits shows how social prejudices and discrimination have 'broken' the Dalit people. The government refers to this group of people as Scheduled Castes(SC).

Casterules were set which did not allow the so-called "untouchables" to take on work, other than what they were meant to do. For example, some groups were forced to pick garbage and remove dead animals from the village. But they were not allowed to enter the homes of the upper castes or take water from the village well, or even enter temples. Their children could not sit next to children of other castes in school. Thus upper castes acted in ways, which did not give the so-called "untouchables" the same rights as they enjoyed.

*What is the difference between discrimination and stereotypes? How do you think a person who is discriminated against might feel?*

*Dr Bhim Rao Ambedkar (1891-1956) is considered the father of the Indian Constitution and is also the best known leader of the Dalits. Dr Ambedkar fought for the rights of the Dalit community. He was born into the Mahar caste, which was considered untouchable. He encouraged Dalits to send their children to school and college. He also urged Dalits to take on different kinds of government jobs in order to move out of the caste system. He led many efforts of Dalits to gain entry into temples. Later in life he converted to Buddhism in his search for a religion that treated all members equally. Dr Ambedkar believed that Dalits must fight the caste system and work towards a society based on respect not just for a few but for all persons.*

#### **Striving for Equality**

The struggle for freedom from British rule also included within it the struggle of large groups of people who not only fought against the British but also fought to be treated more equally. Dalits, women, tribals and peasants fought against the inequalities they experienced in their lives.

As pointed out earlier, many Dalits organised themselves to gain entry into temples. Women demanded that they should have as much a right to education as men did. Peasants and tribals fought to release themselves from the grasp of the moneylender and the high interest they were charged. When India became a nation in 1947 our leaders too were concerned about the different kinds of inequalities that existed. Those who wrote the Constitution of India, a document that laid out the rules by which the nation would function, were aware of the ways in which discrimination had been practised in our society and how people had struggled against this. Many leaders of these struggles such as Dr Ambedkar had also fought for the rights of the Dalits. So these leaders set out a vision and goals in the Constitution to ensure that all the people of India were considered equal. This equality of all persons is seen as a key value that unites us all as Indians. Everyone has equal rights and opportunities. Untouchability is seen as a crime and has been legally abolished by law. People are free to choose the kind of work they wish to do. Government jobs are open to all people. In addition, the Constitution also placed responsibility on the government to take specific steps to realise this right to equality for poor and other such marginal communities.

The writers of the Constitution also said that respect for diversity was a significant element in ensuring equality. They felt that people must have the freedom to follow their religion, speak their language, celebrate their festivals and express themselves freely. They said that no one language, religion or festival should become compulsory for all to follow. They said that the government must treat all religions equally.

Therefore, India became a secular country where people of different religions and faiths have the freedom to practise and follow their religion without any fear of discrimination. This is seen as an important element of our unity – that we all live together and respect one other.

Though these ideals are enshrined in our Constitution, this chapter points out that inequalities exist even today. Equality is a value that we have to keep striving for and not something which will happen automatically. People's struggles and positive actions by the

government are necessary to make this a reality for all Indians.

**Important Terms** **Prejudice:** An unreasonable dislike and distrust. **Stereotype:** Fixing an image, belief or idea.

**Discrimination:** The practice of treating one person in an unfair way. **Striving:** Great effort to achieve something.

**Superstition:** A belief that some objects or actions are lucky or unlucky. **Secular:** Not controlled by any religion.

## Chapter 3 What Is Government?

Every country needs a government to make decisions and get things done. These can be decisions about where to build roads and schools, or how to reduce the price of onions when they get to be expensive or ways to increase the supply of electricity. The government so takes action on many social issues, for example it has several programmes to help the poor. It does other important things such as running postal and railway services.

The government also has the job of protecting the boundaries of the country and maintaining peaceful relations with other countries. It is responsible for ensuring that all its citizens have enough to eat and have good health facilities. If there is a dispute or if someone has committed a crime you find people in a court.

Courts are also part of the government.

Perhaps you are wondering how governments manage to do all this. And why it is necessary for them to do so. When human beings live and work together, there needs to be some amount of organisation so that decisions can be made.

Some rules have to be made that apply to everyone. For example, there is a need to control resources and protect the territory of a country, so people can feel secure. Governments do this on behalf of their people by exercising leadership, taking decisions and implementing these among all the people living in their territory.

#### **Levels of Government**

Now that you know that the government is responsible for so many different things, can you think of how it manages to do all these? The government works at different levels: at the local level, at the level of the state and at the national level. The local level means in your village, town or locality, the state level would mean that which covers an entire state like Haryana or Assam and the national level relates to the entire country (see the maps). Later in this book, you will read about how local level government functions, and when you go into the next few classes you will learn about how governments function at the state and central levels.

#### **Laws and the Government**

The government makes laws and everyone who lives in the country has to follow these. This is the only way governments can function. Just like the government has the power to make decisions, similarly it has the power to enforce its decisions. For example, there is a law that says that all persons driving a motor vehicle must have a licence. Any person caught driving a vehicle without a licence can either be jailed or fined a large sum of money. Without these laws the government's power to make decisions is not of much use.

In addition to any actions that governments can take, there are also steps that people can take if they feel that a particular law is not being followed. If a person feels, for example, that they were not hired for a job because of their religion or caste, he or she may approach the

court and claim that the law is not being followed. The court can then give orders about what should be done.

### Types of Government

*Who gives the government this power to make decisions and enforce laws?* The answer to this question depends on the type of government there is in a country. In a democracy it is the people who give the government this power. They do this through elections in which they vote for particular persons and elect them. Once elected, these persons form the government. In a democracy the government has to explain its actions and defend its decisions to the people.

Another form of government is monarchy. The monarch (king or queen) has the power to make decisions and run the government. The monarch may have a small group of people to discuss matters with, but the final decision-making power remains with the monarch. Unlike in a democracy, kings and queens do not have to explain their actions or defend the decisions they take.

### Democratic Governments

India is a democracy. This achievement is the result of a long and eventful struggle of the Indian people. There are other places in the world where people have also struggled to have democracies. You now know that the main feature of a democracy is that the people have the power to elect their leaders. So in a sense a democracy is rule by the people. The basic idea is that people rule themselves by participating in the making of these rules. Democratic governments in our times are usually referred to as representative democracies. In representative democracies people do not participate directly but, instead, choose their representatives through an election process. These representatives meet and make decisions for the entire population. These days a government cannot call itself democratic unless it allows what is known as universal adult franchise. This means that all adults in the country are allowed to vote.

Nowhere in the world have governments willingly shared power. All over Europe and USA, women and the poor have had to fight for participation in government. Women's struggle to vote got strengthened during the First World War. This movement is called the women's suffrage movement as the term suffrage usually means right to vote. During the War, many men were away fighting, and because of this women were called upon to do work that was earlier considered men's work. Many women began organising and managing different kinds of work. When people saw this they began to wonder why they had created so many unfair stereotypes about women and what they were capable of doing. So women began to be seen as being equally capable of making decisions. The suffragettes demanded the right to vote for all women and to get their demands heard they chained themselves to railings in public places. Many suffragettes were imprisoned and went on hunger strikes, and they had to be fed by force. American women got the right to vote in 1920 while women in the UK got to vote on the same terms as men some years later, in 1928.

In India, before Independence, only a small minority was allowed to vote and they therefore came together to determine the fate of the majority. Several people including Gandhiji were shocked at the unfairness of this practice and demanded that all adults have the right to vote. This is known as universal adult franchise. Writing in the journal *Young India* in 1931, Gandhiji said, "I cannot possibly bear the idea that a man who has got

wealth should have the vote, but that a man who has got character but no wealth or literacy should have no vote, or that a man who works honestly by the sweat of his brow day in and day out should not have the vote for the crime of being a poor man...".

**Important Terms** **Monarchy:** A type of government in which the king or queen rules the people. **Democracy:** A type of government in which people elect their representatives. **Enforce:** Order to follow. **Eventful:** Memorable. **Adult franchise:** Permission for adults to vote. **Suffrage:** Right to vote.

## Chapter 4 Key Elements Of a Democratic Government

In this chapter you will read about some of the key elements that influence the working of a democratic government. These include people's participation, there solution of conflict and equality and justice.

**South Africa** is a country that has people of several races. There are black people who belong to South Africa, whites who came there to settle, and Indians who came as labourers and traders.

Non-whites were not allowed to vote. The best land in the country was reserved for the white people, and non-whites had to live on the worst available land. Thus blacks and coloured people were not considered to be equal to whites. The African National Congress, a group of people who led the struggle against apartheid, and their most well known leader, Nelson Mandela fought the apartheid system for several years. Finally, they succeeded and in 1994 South Africa became a democratic country in which people of all races were considered equal.

### PARTICIPATION

Why do we have regular elections? You've already read in the previous chapter that people make the decisions in a democracy. Through voting in elections people elect leaders to represent them. These representatives take decisions on behalf of the people. In doing so it is assumed that they will keep in mind the voices and interests of the people.

All governments are elected for fixed periods. In India this period is five years. Once elected, governments can stay in power only for that period. If they want to continue to be in power then they have to be re-elected by the people. This is a moment when people can sense their power in a democracy. In this way the power of the government gets limited by regular elections.

### Other ways of participating

Elections are usually held once in five years. Besides voting there are other ways of participating in the process of government. People participate by taking an interest in the working of the government and by criticising it when required. There are many ways in which people express their views and make governments understand what actions they should take. These include dharnas, rallies, strikes, signature campaigns etc. Things that are unfair and unjust are also brought forward. Newspapers, magazines and TV also play a role in discussing government issues and responsibilities.

While it is true that a democracy allows people to participate, it is also true that not all sections of people are actually able to do so. Another way for people to participate is by organising themselves into social movements that seek to challenge the government and its functioning. Members of the minority community,



dalits, adivasis, women and others are often able to participate in this manner. If a country's people are alert and interested in how the country is run, the democratic character of the government of that country will be stronger. So the next time we see a rally winding through the streets of our cities and towns or villages we should pause to find out what the rally is about, who is participating in it, and what they are protesting about. This will help to give us a sense of how our government works.

#### Need to Resolve Conflict

Conflicts occur when people of different cultures, religions, regions or economic backgrounds do not get along with each other, or when some among them feel they are being discriminated against. People may use violent means to settle their differences. This leads to fear and tension among others living in an area. The government is responsible for helping to resolve conflicts.

The Indian Constitution lays down the basic rules or laws that have to be followed by everyone. These laws are for both the government and the people. Conflicts and differences have to be resolved according to these laws.

Let's read about some of the conflicts in our society and the role of the government in resolving them. Religious processions and celebrations can sometimes lead to conflicts. Rivers too can become a source of conflict between states. A river may begin in one state, flow through another and end in a third. The sharing of river water between different states that the river goes through is becoming an issue of conflict. For example, you may have heard about the Cauvery water dispute between Karnataka and Tamil Nadu. The water stored in Krishna Raja Sagara dam in Karnataka is used for irrigating a number of districts and for meeting the needs of the city of Bengaluru. The water stored in Mettur dam in Tamil Nadu is used for crops grown in the delta region of that state.

A conflict arises because both dams are on the same river. The downstream dam in Tamil Nadu can only be filled up if water is released from the upstream one located in Karnataka. Therefore, both states can't get as much water as they need for people in their states. This leads to conflict. The central government has to step in and see that a fair distribution is worked out for both states.

#### Equality and Justice

One of the key ideas of a democratic government is its commitment to equality and justice. Equality and justice are inseparable. The earlier practice of untouchability is now banned by law. This group of people were denied education, transport or medical facilities and even the chance to offer prayers. Dr Ambedkar, whom you have read about earlier in this book, and many others like him, realised that such practices must not continue and that justice can only be achieved when people are treated equally.

The government also recognises this and makes special provisions for groups within society that are unequal. For instance, in our society there is a general tendency to value and care for the boy child more than the girl child.

**Important Terms** **Apartheid:** Separation on the basis of race. **Mingle:** Intermixing of things. **Conflict:** A state of disagreement or argument between people group or countries. **Religious:** Pertaining or relation to religion, faith. **Unsociability:** A feeling of people belonging to the lowest social group, not to touch them. **Violate:** To break or ignore any rule or law. **Equipped:** Provided a person or place with

the thing that are needed for a particular kind of activity or work.

## Chapter 5 Panchayati Raj

*What happens after people elect their representatives? How are decisions made? Let's look at how this takes place in rural areas. Here, we look at the Gram Sabha, which is a meeting where people directly participate and seek answers from their elected representatives.*

The Gram Sabha is a meeting of all adults who live in the area covered by a Panchayat. This could be only one village or a few villages. In some states, as in the example above, a village meeting is held for each village. Anyone who is 18 years old or more and who has the right to vote is a member of the Gram Sabha.

#### Gram Sabha

The Gram Sabha meeting begins with the Panchayat President (who is also called the Sarpanch) and the members of the Panchayat (the Panchs) presenting a plan on repairing the road that connects the village to the main highway. After this, the discussion moves to the subject of water and water shortages.

Every village Panchayat is divided into wards, i.e. smaller areas. Each ward elects a representative who is known as the Ward Member (Panch). All the members of the Gram Sabha also elect a Sarpanch who is the Panchayat President. The Ward Panchs and the Sarpanch form the Gram Panchayat. The Gram Panchayat is elected for five years.

The Gram Panchayat has a Secretary who is also the Secretary of the Gram Sabha. This person is not an elected person but is appointed by the government. The Secretary is responsible for calling the meeting of the Gram Sabha and Gram Panchayat and keeping a record of the proceedings.

The Gram Sabha is a key factor in making the Gram Panchayat play its role and be responsible. It is the place where all plans for the work of the Gram Panchayat are placed before the people.

The Gram Sabha prevents the Panchayat from doing wrong things like misusing money or favouring certain people. It plays an important role in keeping an eye on the elected representatives and in making them responsible to the persons who elected them.

#### The Gram Panchayat

The Gram Panchayat meets regularly and one of its main tasks is to implement development programmes for all villages that come under it. As you have seen, the work of the Gram Panchayat has to be approved by the Gram Sabha.

In some states, Gram Sabhas form committees like construction and development committees. These committees include some members of the Gram Sabha and some from the Gram Panchayat who work together to carry out specific tasks.

#### The work of a Gram Panchayat includes

1. The construction and maintenance of water sources, roads, drainage, school buildings and other common property resources.
2. Levying and collecting local taxes.
3. Executing government schemes related to generating employment in the village.

#### Sources of funds for the Panchayat

- Collection of taxes on houses, market places etc.
- Government scheme funds received through various departments of the government – through the Janpad

and Zila Panchayats.

-Donations for community works etc.

Let's see what the Hardas Gram Panchayat was able to do.

### Three Levels of Panchayats

After reading about what happened in the Gram Sabha and the Gram Panchayat in Hardas village you can understand that the Panchayati Raj System is a process through which people participate in their own government. The Panchayati Raj system is the first tier or level of democratic government. The Panchs and the Gram Panchayat are answerable to the Gram Sabha because it is the members of the Gram Sabha who elected them.

This idea of people's participation in the Panchayati Raj system extends to two other levels. One is the Block level, which is called the Janpad Panchayat or the Panchayat Samiti.

The Panchayat Samiti has many Gram Panchayats under it. Above the Panchayat Samiti is the District Panchayat or the Zila Parishad. The Zila Parishad actually makes developmental plans at the district level. With the help of Panchayat Samitis, it also regulates the money distribution among all the Gram Panchayats. Within the guidelines given in the Constitution each state in the country has its own laws with regard to Panchayats. The idea is to provide more and more space for people to participate and raise their voices.

**Important Terms** **Gram Sabha:** A meeting of all adults who live in the area covered by a Panchayat. **Gram Panchayat:** An elected body having Panchs and Sarpanch. **Panchayat Samiti:** A body constituting many Gram Panchayats. **Zila Panchayat:** It makes development plans at the district level. **Constitution:** Written composition of laws for guiding a Sovereign State.

## Chapter 6 Rural Administration

**Gram Sabha:** The Panchayati Raj, through the Gram Sabha, can solve land dispute problems, instead of taking the issues to the police station.

• **Area of the Police Station** Every police station has an area that comes under its control. All persons in that area can report cases or inform the police about any theft, accident, injury, flight, etc. It is the responsibility of the police of that station to enquire, to investigate and take action on the cases within its area.

• **Patwari's Duties:** Measuring land and keeping land records is the main work of the Patwari. The Patwari is known by different names in different states - in some villages such officers are called Lekhpal, in others Kanungo or Karamchari or Village Officer etc. We will refer to this officer as Patwari. Each Patwari is responsible for a group of villages. The Patwari maintains and updates the records of the village. The map and the corresponding details from the register on the next page are a small part of the records kept by the Patwari. The Patwari usually has ways of measuring agricultural fields. In some places a long chain is used. The Patwari is also responsible for organising the collection of land revenue from the farmers and providing information to the government about the crops grown in this area. This is done from the records that are kept, and this is why it's important for the Patwari to regularly update these. Farmers may change the crops grown on their fields or someone may dig a well somewhere, and keeping track of all this is the work of the revenue department of the government.

Senior people in this department supervise the Patwari's work.

• **Local Administration:** All the States of India are divided into districts. For managing matters relating to land, these districts are further sub-divided. These sub-divisions of a district are known by different names such as Tehsil, Taluka, etc. At the head is the District Collector and under him are the Revenue Officers, also known as the Tehsildars. Tehsildars have to hear disputes and supervise the work of the Patwari and ensure that records are properly kept and land revenue is collected. They make sure that farmers get a copy of their land records. Students can obtain their caste certificates, etc from them as well.

• **A New Law:** The Hindu Succession Amendment Act (2005) came into force from September 2005. The Government of India has issued notification to this effect.

• **Hindu Succession Amendment Act (2005):** This Act has been passed to remove gender discriminatory provisions in the Hindu Succession Act, 1956 and gives the following rights to daughters under Section 6: The daughter of coparcener (joint heir) by birth becomes a coparcener by right in the same manner as the son. The daughter has the same rights in the coparcener property as she would have had if she had been a son. In the new law, sons, daughters and their mothers can get an equal share of the land.

• **Tehsildar:** Tehsildar is a revenue administrative officer in charge of obtaining taxation from a Tehsil. A Tehsildar is also called Patwari.

• **Survey:** The act of looking, seeing or observing.

• **Record:** Anything that is written down and preserved as evidence, e.g., Land records in villages maintained by Patwari.

• **Investigation:** A careful search or examination; systematic inquiry.

• **Dispute:** Dispute is a quarrel or a debate.

**Important Terms** **Rescue:** To save something or someone from a situation of danger or harm. **Insist:** To say firmly and often that something is true. **Patwari:** A person who measures land and maintains land records in villages. **Dowry:** Property or money that a woman gives to her husband at the time of marriage. **Inherited:** Received money, property, etc, from someone after his/her death. **Argument:** Debate. **Territories:** Lands of a particular type.

## Chapter 7 Urban Administration

### The Ward Councillor and Administrative Staff

*The city is divided into different wards and ward councillors get elected. The complicated decisions that affect the entire city are taken by groups of councillors who form committees to decide and debate issues. When the problems are within a ward then the people who live in the ward can contact their councillors. While the Councillor's Committees and the councillors decide on issues, the Commissioner and the administrative staff implement these. The Commissioner and the administrative staff are appointed. Councillors are elected.*

• **Ward Councillor:** The Ward Councillors are responsible for the construction of hospitals. They are elected by the people living in that ward/area. Groups of Councillors make decisions on policy-making. Committees of Ward Councillors look after water, garbage collection and street lighting.

• **Duties of the Ward Councillors:** Ward Councillors

make the budget. They look into the demands of their respective Wards. They assign the task of implementation to the administrative staff.

- **Administrative Staff:** Ward people can approach Ward Councillors regarding their problems, within a Ward. Members of the Councillor Committees decide on various issues. Commissioner and the administrative staff implement the issues. Commissioner and administrative staff are appointed people. Ward Councillors are elected.

- **Municipal Council:** It is an Administrative Department in the cities. It supervises the Division of work in different departments. It includes the Departments of water, garbage collection, construction of roads, sanitation, etc.

- **Municipal Corporation:** Takes care of street lights, garbage collection, water supply, etc. Creates awareness about epidemics such as malaria, dengue, etc. Teaches people about the preventive measures to avoid diseases. Runs schools, hospitals and dispensaries.

#### How does the Municipal Corporation get its money?

Providing and running so many services requires a lot of money. The Municipal Corporation collects this in different ways. A tax is a sum of money that people pay to the government for the services the government provides. People who own homes have to pay a property tax as well as taxes for water and other services. The larger the house the more the tax. Property taxes however form only 25-30 per cent of the money that a Municipal Corporation earns.

There are also taxes for education and other amenities. If you own a hotel or shop then you have to pay a tax for this as well. Also the next time you go to see a movie look carefully at your ticket because you pay a tax for this as well. Thus while rich people account for property taxes, a much wider population pays more general taxes.

- **Community Protest:** Ward Community can submit its petition to the Ward Councillor. Collective action taken is by the Ward Engineer and Ward Council. Petitions are forwarded to the Municipal Corporation Office. Municipal Corporation solves the issues.

- **Garbage:** Discarded food waste or any other unwanted/useless material.

- **Municipalities:** A place with own local government: a city, town or other area.

- **Plague:** Plague is a serious, potentially life threatening infectious disease that is usually transmitted to humans by the bite of rodent fleas. It was one of the scourges in history. There are three major forms of the disease: bubonic, septicemic and pneumonic.

## Chapter 8 Rural Livelihoods

In the first chapter we looked at the many kinds of diversity in our lives. We also explored how living in different regions has an effect on the work people do, the kinds of plants, trees, crops or things that become important to them. In this chapter we will look at the different ways in which people earn their living in villages. And here too, as in the first two chapters, we will examine whether people have equal opportunities to earn a living. We will look at the similarities in their life situations and the problems that they face.

**Different Occupations:** People in a village are involved in different professions such as blacksmiths, teachers, washer men, weavers, barbers, mechanics,

shopkeepers and traders.

Nearly two-fifth of all rural families are agricultural labourers in our country. There are some who have small plots of land while others are landless. Not being able to earn money throughout the year forces people in many rural areas to travel long distances in search of work. This travel, or migration, takes place during particular seasons.

**Seasonal Unemployment:** Seasonal unemployment is found basically in the agricultural sector. In the industrial sector, people are employed normally for all the days in a year. But this is not true for agriculture. This is due to the fact that agricultural operations require labour only during certain seasons. In between the seasons, the workers in agriculture remain idle or have no productive work to be engaged in.

#### Main problems faced by Indian farmers

The three problems faced by the Indian farmers are: (i) Lack of availability of water for irrigation. The high yielding variety of seeds, chemical fertilizers, insecticides, pesticides, etc., are very expensive and the farmers find it difficult to purchase them. (ii) Most of the farmers have small holdings which are uneconomical. (iii) In case of a crop failure, it becomes difficult in paying off the loans taken from the banks and private money lenders. In order to pay the debts, they are compelled to sell their produce at cheaper rates.

#### On being in Debt

Very often farmers need to borrow money to purchase basic things like seeds, fertilisers and pesticides. Often they borrow this money from moneylenders. If the seeds are not of good quality or pests attack their crop there can be a major crop failure. The crops can also be ruined if the monsoon does not bring enough rain. When this happens farmers sometimes are unable to pay back their loans. And, for the family to survive, they may even have to borrow more money. Soon the loan becomes so large that no matter what they earn, they are unable to repay.

This is when we can say they are caught in debt. In recent years this has become a major cause of distress among farmers. In some areas this has also resulted in many farmers committing suicide.

#### Agricultural Labourers and Farmers in India

In India nearly two out of every five rural families are agricultural labourer families. All of them depend on the work they do on other people's fields to earn a living. Many of them are landless and others may own very small plots of land. In the case of small farmers their land is barely enough to meet their needs. In India 80 per cent of farmers belong to this group. Only 20 per cent of India's farmers are large farmers. These large farmers cultivate most of the land in the villages. A large part of their produce is sold in the market. Many of them have started other businesses such as shops, moneylending, trading, small factories etc.

#### Causes for the growth of agricultural labourers?

- (i) Increase in population.
- (ii) Decline of cottage and handicraft industries.
- (iii) Increased indebtedness.
- (iv) Eviction of small farmers and tenants from the land.

**Why agricultural labourers are forced to accept low wages?** Poverty and illiteracy are the two main factors responsible for the sufferings of farmers in rural India. A large proportion of poor people live in rural areas. Poverty remains a chronic condition for 30% of India's rural population.

#### Rural Livelihoods



People in rural areas earn their living in various ways. Some work on farms while others earn their living on nonfarm activities. Working on farms involves operations such as repairing the land, sowing, weeding and harvesting of crops. We depend on nature for the growth of these crops. Hence life revolves around certain seasons. People are busy during sowing and harvesting and less so at other times. Rural people in different regions of the country grow different crops. However, we do find similarities in their life situations and in the problems that they face.

How people are able to survive or earn will depend upon the land that they cultivate. Many depend on these lands for work as labourers. Most farmers grow crops both for their own requirements and also to sell in the market. Some have to sell to traders from whom they have borrowed money. For their survival, many families need to borrow money for their work or when no work is available. There are some families in rural areas which thrive on large acres of lands, business and other activities. However, most small farmers, agricultural labourers, fishing families, crafts persons in the villages do not find enough work to keep them employed throughout the year.

**Why do poor people stay poor in rural India?** The major cause of poverty among India's rural people is the lack of access to productive assets and financial resources. High level of illiteracy and lack of adequate health facilities are also responsible for the poor staying poor in rural India.

## Chapter 9 Urban Livelihoods

There are more than five thousand towns and twenty seven big cities in India. Big cities like Chennai, Mumbai, Delhi, Kolkata etc. have more than a million people living and working here. They say that 'the city never sleeps'

### Working on the Street

There are almost one crore 'street vendors' in the country working in urban areas. Street vending was till recently looked upon only as an obstruction to traffic and to people walking. However with the effort of many organisations it is now recognised as a general benefit and as a right of people to earn their livelihood. The government is thinking about modifying the law that banned street vendors, so that they have a place to work and that there is also a free flow of traffic and people. Hawking zones have been suggested for towns and cities. It has also been suggested that mobile vendors should be allowed to move around freely. Hawkers need to be part of committees that are set up to take these and other decisions relating to them.

### In the Factory-Workshop Area

Small workshops and factories need casual workers. These workers are permanent i.e. they are required to come as and when the employer needs them. They are employed when the employer gets large orders or during certain seasons. At other times of the year they have to find some other work. These jobs are not permanent. If workers complain about their pay or working conditions they are asked to leave. There is no job security or protection if there is ill treatment. They are also expected to work very long hours.

**Who are casual workers?** The casual workers are the workers who are employed on a temporary basis with generally limited entitlements to benefits and little or no security of employment. The main feature is the absence of a continuing relationship of any stability with an employer, which could lead to their not being considered 'employees' at all.

### Why people prefer organised sectors?

Un-organised sector is characterised by low wages, long hours of work and lack of job security. People prefer to work in an organised sectors because of the following reasons:

- (i) Workers enjoy security of employment.
- (ii) There are fixed number of working hours. If workers work more, they have to be paid overtime by the employer.
- (iii) Employees of the organised sectors are entitled to medical leaves, payment during holidays, provident fund, etc.
- (iv) Workers also get medical benefits and under the laws, factory manager has to ensure the provision of facilities like drinking water and a safe working environment.

**Local bodies in urban areas:** The local bodies that look after the problems of the urban areas are: (i) Municipal Corporations, (ii) Municipalities, and (iii) Town Area Committees.

**(i) Municipal Corporations:** These are the local governing bodies of big cities such as Delhi, Mumbai, Kolkata, Chennai, etc. The main functions of the Municipal Corporations are providing public health and sanitation, making arrangement for vaccination, supply of safe drinking water, clearing and disposal of garbage, cleaning roads, drains and public toilets.

**(ii) Municipalities:** Smaller towns and cities with population ranging between 20, 000-5, 00, 000 have Municipalities as the local government body.

**(iii) Town Area Committees:** Municipalities and Municipal Corporations carry their day-to-day work with the help of a number of committees such as the Education Committee, the Public Health Committee and the District Planning Committee.

# NCERT Class 7

## Polity Social & Political Life 2

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 On Equality

Equality is the soul of Indian democracy. **Democracy** is the form of Government of the people, by the people and for the people.

#### Equal right to vote

In a democratic country, like India, all adults irrespective of what religion they belong to, how much education they have had, what caste they are, or whether they are rich or poor are allowed to vote. This is called **universal adult franchise** and is an essential aspect of all democracies. The idea of universal adult franchise is based on the idea of equality because it states that every adult in a country, irrespective of their wealth and the communities she/he belongs to, has one vote. But do you think very poor people with hard circumstantial issues in their daily life exercise their vote with the same freedom as rich people does.

#### Other kinds of equality

One of the more common forms of inequality in India is the caste system. If you live in rural India your caste identity is something that you probably learned or experienced very young. If you live in urban India some of you might think that people no longer believe in caste. Other form of inequality is based on religions. People have strong biases and stereotypes which have basis in religious identities..

#### Recognising dignity

You have understood by now that the caste we are born into, the religion we practice, the class background we come from, whether we are male or female – these are often the things that determine why some people are treated unequally. When persons are treated unequally, their **dignity** is violated.

*“Man is mortal. Everyone has to die some day or the other. But one must resolve to lay down one’s life in enriching the noble ideals of self-respect and in bettering one’s human life... Nothing is more disgraceful for a brave man than to live life devoid of self-respect.” – B.R. Ambedkar*

#### Equality in Indian democracy

The Indian **Constitution** recognises every person as equal. This means that every individual in the country, including male and female persons from all castes, religions, tribes, educational and economic backgrounds are recognised as equal. This is not to say that inequality ceases to exist. It doesn’t. But atleast, in democratic India, the principle of the equality of all persons is recognised. While earlier no law existed to protect people from discrimination and ill-treatment, now there are several that work to see that people are treated with dignity and as equals.

This recognition of equality includes some of the following provisions in the Constitution: first that every person is equal before the law. What this means is that

every person has to obey the same laws. Second, no person can be discriminated against on the basis of their religion, race, caste, place of birth or whether they are female or male. Third, every person has access to all public places including playgrounds, hotels, shops and markets. All persons can use publicly available wells, roads and bathing ghats. Fourth, untouchability has been abolished.

The two ways in which the government has tried to implement the equality that is guaranteed in the Constitution is first through laws and second through government programmes or schemes to help disadvantaged communities. There are several laws in India that protect every person’s right to be treated equally. In addition to laws, the government has also set up several schemes to improve the lives of communities and individuals who have been treated unequally for several centuries. These schemes are to ensure greater opportunity for people who have not had this in the past.

*One of the steps taken by the government includes the midday meal scheme. This refers to the programme introduced in all government elementary schools to provide children with cooked lunch. Tamil Nadu was the first state in India to introduce this scheme, and in 2001, the Supreme Court asked all state governments to begin this programme in their schools within six months. This programme has had many positive effects. These include the fact that more poor children have begun enrolling and regularly attending school. Teachers reported that earlier children would often go home for lunch and then not return to school but now with the midday meal being provided in school, their attendance has improved. Their mothers, who earlier had to interrupt their work to feed their children at home during the day, now no longer need to do so. This programme has also helped reduce caste prejudices because both lower and upper caste children in the school eat this meal together, and in quite a few places, Dalit women have been employed to cook the meal. The midday meal programme also helps reduce the hunger of poor students who often come to school and cannot concentrate because their stomachs are empty.*

While government programmes play an important role in increasing equality of opportunity, there is much that still needs to be done. While the midday meal programme has helped increase the enrolment and attendance of poor children in school, there continues to be big differences in our country between schools that the rich attend and those that the poor attend. Even today there are several schools in the country in which Dalit children are discriminated against and treated unequally. These children are forced into unequal situations in which their dignity is not respected. This is because people refuse to think of them as equal even though the law requires it.

One of the main reasons for this is that attitudes change very slowly. Even though persons are aware that

discrimination is against the law, they continue to treat people unequally on the basis of their caste, religion, disability, economic status and because they are women. It is only when people begin to believe that no one is inferior, and that every person deserves to be treated with dignity, that present attitudes can change. Establishing equality in a democratic society is a continuous struggle and one in which individuals as well as various communities in India contribute to and you will read more about this in this book.

### Issues of equality in other democracies

You are probably wondering whether India is the only democratic country in which there is inequality and where the struggle for equality continues to exist. The truth is that in many democratic countries around the world, the issue of equality continues to be the key issue around which communities struggle. So, for example, in the United States of America, the African-Americans whose ancestors were the slaves who were brought over from Africa, continue to describe their lives today as largely unequal. This, despite the fact that there was a movement in the late 1950s to push for equal rights for African-Americans. Prior to this, African-Americans were treated extremely unequally in the United States and denied equality through law. For example, when travelling by bus, they either had to sit at the back of the bus or get up from their seat whenever a white person wished to sit.

### Civil Rights Movement.

The Civil Rights Act of 1964 prohibited discrimination on the basis of race, religion or national origin. It also stated that all schools would be open to African-American children and that they would no longer have to attend separate schools specially set up for them. However, despite this, a majority of African-Americans continue to be among the poorest in the country. Most African-American children can only afford to attend government schools that have fewer facilities and poorly qualified teachers as compared to white students who either go to private schools or live in areas where the government schools are as highly rated as private schools.

### Challenge of democracy

No country can be described as being completely democratic. There are always communities and individuals trying to expand the idea of democracy and push for a greater recognition of equality on existing as well as new issues. Central to this is the struggle for the recognition of all persons as equal and for their dignity to be maintained. In this book you will read about how this issue of equality affects various aspects of our daily lives in democratic India. As you read these chapters, think about whether the equality of all persons and their being able to maintain their dignity is upheld.

### Prohibition of discrimination on grounds of religion, race, caste, sex or place of birth.

- (1) The State shall not discriminate against any citizen on grounds only of religion, race, caste, sex, place of birth or any of them.
- (2) No citizen shall, on grounds only of religion, race, caste, sex, place of birth or any of them, be subject to any disability, liability, restriction or condition with regard to
  - (a) access to shops, public restaurants, hotels and places of public entertainment; or
  - (b) the use of wells, tanks, bathing ghats, roads and places of public resort maintained wholly or partly out of State funds or dedicated to the use of the general

public.

Excerpt from Article 15 of the Indian Constitution

**Important Terms Discrimination:** treat differently

**Universal adult franchise:** This is a very important aspect of democratic societies. It means that all adult (those who are 18 and above) citizens have the right to vote irrespective of their social or economic backgrounds. **Dignity:** This refers to thinking of oneself and other persons as worthy of respect.

**Constitution:** This is a document that lays down the basic rules and regulations for people and the government in the country to follow. **Civil Rights Movement:** A movement that began in USA in 1950s in which African-American people demanded equal rights and an end to racial discrimination.

## Chapter 2

### Role Of The Government In Health

In a democracy people expect the government to work for their welfare. This could be through the provision of education, health, employment, housing or the development of roads, electricity etc. In this chapter we shall examine the meanings and problems related to health.

### What is health?

Health means our ability to remain free of illness and injuries. But health isn't only about disease. You may have associated only some of the situations in the above collage with health. What we often ignore is the fact that each of the above situations is related to health. Apart from disease, we need to think of other factors that affect our health. For example, if people get clean drinking water or a pollution free environment they are likely to be healthy. On the other hand, if people do not get adequate food to eat or have to live in cramped conditions, they will be prone to illness.

All of us would like to be active and in good spirits in whatever we may be doing. It isn't healthy to be dull, inactive, anxious or scared for long stretches of time. We all need to be without mental strain. All of these various aspects of our lives are a part of health.

### Healthcare in India

**In India, it is often said that we are unable to provide health services for all because the government does not have enough money and facilities.**

India has a large number of doctors, clinics and hospitals. The country also has considerable experience and knowledge in running a public healthcare system. This is a system of hospitals and health centres run by the government. It has the ability to look after the health of a large section of its population scattered over hundreds of thousands of villages. Moreover, there has been a phenomenal advancement in medical sciences whereby many new technologies and treatment procedures are available in the country.

However, at the same time how poor the health situation in our country is? With all the above positive developments we are not able to provide proper healthcare facilities to people. This is the paradox – something that is contrary to what we would expect. Our country has the money, knowledge and people with experience but cannot make the necessary healthcare available to all. In this chapter, we will look at some of the reasons for this.

### Public and private health care services

Government uses tax money for providing many public services for the benefit of all citizens. Some services such as defence, police, judicial system, highways etc. benefit all citizens. Otherwise, the citizens cannot



organise these services for themselves.

Taxes fund developmental programmes and services such as education, health care, employment, social welfare, vocational training etc. required for needy citizens. Tax money is utilised for relief and rehabilitation in case of natural disasters such as floods, earthquakes, tsunami etc. Space, nuclear, and missile programmes are also funded from the revenues collected as taxes.

In order to prevent and treat illnesses we need appropriate healthcare facilities such as health centres, hospitals, laboratories for testing, ambulance services, blood banks, etc., that can provide the required care and services that patients need. In order to run such facilities we need health workers, nurses, qualified doctors and other health professionals who can advise, diagnose and treat illnesses. We also need the medicines and equipment that are necessary for treating patients. These facilities are required to take care of us.

### Public health services

#### In what ways is the public health system meant for everyone?

The public health service is a chain of health centres and hospitals run by the government. They are linked together so that they cover both rural and urban areas and can also provide treatment to all kinds of problems – from common illnesses to special services. At the village level there are health centres where there is usually a nurse and a village health worker. They are trained in dealing with common illnesses and work under the supervision of doctors at the Primary Health Centre (PHC). Such a centre covers many villages in a rural area. At the district level is the District Hospital that also supervises all the health centres. Large cities have many government hospitals such as the one where Aman was taken and also specialised government hospitals such as the ones in Hakim Sheik's story. The health service is called 'public' for many reasons. In order to fulfil its commitment of providing health care to all citizens, the government has established these hospitals and health centres. Also, the resources needed to run these services are obtained from the money that we, the public, pay to the government as taxes. Hence, such facilities are meant for everyone. One of the most important aspects of the public health system is that it is meant to provide quality health care services either free or at a low cost, so that even the poor can seek treatment. Another important function of public health is to take action to prevent the spread of diseases such as TB, malaria, jaundice, cholera, diarrhoea, chikungunya, etc. This has to be organised by the government with the participation of people otherwise it is not effective. For example, when taking up a campaign to see that

The government must safeguard the Right to Life of every person. The Court said that the difficulty that Hakim Sheik had to face could have cost him his life. If a hospital cannot provide timely medical treatment to a person, it means that this protection of life is not being given.

The Court also said that it was the duty of the government to provide the necessary health services, including treatment in emergency situations. Hospitals and medical staff must fulfil their duty of providing the necessary treatment. Hakim Sheik was denied treatment at various government hospitals. Therefore, the Court asked the State Government to give him the money that he had spent on his treatment.

### Private health facilities

There is a wide range of private health facilities that exist in our country. A large number of doctors run their own private clinics. In the rural areas, one finds Registered Medical Practitioners (RMPs). Urban areas have a large number of doctors, many of them providing specialised services. There are hospitals and nursing homes that are privately owned. There are many laboratories that do tests and offer special facilities such as X-ray, ultrasound, etc. There are also shops from where we buy medicines.

As the name suggests, private health facilities are not owned or controlled by the government. Unlike the public health services, in private facilities, patients have to pay a lot of money for every service that they use. Today the presence of private facilities can be seen all around. In fact now there are large companies that run hospitals and some are engaged in manufacturing and selling medicines. Medical shops are found in every corner of the country.

### Healthcare and equality:

#### Is adequate healthcare available to all?

In India, we face a situation where private services are increasing but public services are not. What is then available to people are mainly private services. These are concentrated in urban areas. As these services are run for profit, the cost of these services is rather high. Medicines are expensive. Many people cannot afford them or have to borrow money when there is an illness in the family.

In order to earn more money, these private services encourage practices that are incorrect. At times cheaper methods, though available, are not used. For example, it is common to find doctors prescribing unnecessary medicines, injections or saline bottles when tablets or simple medicines can suffice.

In fact, barely 20 per cent of the population can afford all the medicines that they require during an illness. Hence, even for those whom one might not think as being poor, medical expenses cause hardship. It was reported in a study that 40 per cent of people who are admitted to a hospital for some illness or injury have to borrow money or sell some of their possessions to pay for the expenses.

For those who are poor, every illness in the family is a cause of great anxiety and distress. What is worse is that this situation tends to happen again and again. Those who are poor are in the first place undernourished. These families are not eating as much as they should. They are not provided basic necessities like drinking water, adequate housing, clean surroundings, etc., and therefore, are more likely to fall ill. The expenses on illness make their situation even worse.

Sometimes it is not only the lack of money that prevents people from getting proper medical treatment. Women, for example, are not taken to a doctor in a prompt manner. Women's health concerns are considered to be less important than the health of men in the family. Many tribal areas have few health centres and they do not run properly. Even private health services are not available.

### What can be done?

There is little doubt that the health situation of most people in our country is not good. It is the responsibility of the government to provide quality healthcare services to all its citizens, especially the poor and the disadvantaged. However, health is as much dependent on basic amenities and social conditions of the people,

as it is on healthcare services. Hence, it is important to work on both in order to improve the health situation of our people. And this can be done. Look at the following example—

### The Kerala experience

In 1996, the Kerala government made some major changes in the state. Forty per cent of the entire state budget was given to panchayats. They could plan and provide for their requirements. This made it possible for a village to make sure that proper planning was done for water, food, women's development and education. This meant that water supply schemes were checked, the working of schools and anganwadis was ensured and specific problems of the village were taken up. Health centres were also improved. All of this helped to improve the situation. Despite these efforts, however, some problems – such as shortage of medicines, insufficient hospital beds, not enough doctors – remained, and these needed to be addressed. Let us look at an example of another country and its approach to issues of health.

### The Costa Rican approach

Costa Rica is considered to be one of the healthiest countries in South America. The main reason for this can be found in the Costa Rican Constitution. Several years ago, Costa Rica took a very important decision and decided not to have an army. This helped the Costa Rican government to spend the money that the army would have used, on health, education and other basic needs of the people. The Costa Rican government believes that a country has to be healthy for its development and pays a lot of attention to the health of its people. The Costa Rican government provides basic services and amenities to all Costa Ricans. For example, it provides safe drinking water, sanitation, nutrition and housing. Health education is also considered very important and knowledge about health is an essential part of education at all levels.

## Chapter 3 How The State Government Works

Government works at three levels – local, state and national. In this chapter, we examine the work of the government at the state level. How does this take place in a democracy? What is the role of a Member of the Legislative Assembly (MLA) and Ministers? How do people express their views or demand action from government? We look at these questions through the example of health.

**How is ruling and opposition party formed?** Every state in India has a legislative Assembly. From each constituency of state people elect one representative for the Legislative Assembly. He/ she is called the Member of Legislative Assembly i.e., MLA. These MLAs belong to different political parties. A political party whose MLAs won more than half the number of constituencies in a state can be said to be in a majority. The political party that has the majority is called the ruling party and all the other members are called the opposition. The MLAs belonging to the ruling party elect their leader who is called the Chief Minister. The Chief Minister then selects other people as Ministers.

**Proceeding of the Legislative Assembly?** The ruling party and the opposition meet in the Legislative Assembly. They have debate on the current problems. During this time the MLAs can express their opinion and ask relevant questions from the minister concerned.

They may even ask supplementary questions while the answers are being given by minister concerned, if they are not satisfied with the reply. They may even give suggestions regarding the issue being discussed. The ministers reply and try to assure the house about the measures being taken.

### How does a government function in a state?

A government is headed by the Chief Minister. The Chief Minister, in order to manage the functioning of government, appoints ministers at various levels like cabinet ministers, state ministers and deputy ministers. Every government department is headed by a cabinet minister who is directly accountable for the functioning of the particular department and responsible for the handling of the government decisions. The bureaucrate project and get the works completed. The ministers give approval to the works.

### Other places where opinions are expressed?

Besides Legislative Assembly there are other places (means) where opinions are expressed about the work of the government and action is demanded. **(i)** The newspapers, T.V. channels and other organisations regularly talk about the government. **(ii)** One such way is the Press Conference. **(iii)** Large numbers of people from different newspapers come to the Press Conference. **(iv)** The minister and some government officials explain the steps that the government has taken. **(v)** There are many questions asked by news reporters at this meeting. These discussions are then reported in different newspapers. **(vi)** In a democracy there are various ways through which people express their views and also take action.

**Important Terms** **MLA:** MLA stands for the Member of the Legislative Assembly **Public Meetings:** Public meetings are gatherings of general public in which the public are made known about the current burning issues confronting the masses. **Epidemic:** A disease that attacks a large number of people in an area at the same time is called an epidemic. **Constituency:** A particular area from which all the voters living there choose their representatives is known as a constituency. **Majority:** Majority is a situation when more than half the number in a group supports a decision or an idea. This is also called a simple majority..

## Chapter 4 Growing Up As Boys And Girls

Being a boy or a girl is an important part of one's identity. The society we grow up in teaches us what kind of behaviour is acceptable for girls and boys, what boys and girls can or cannot do. We often grow up thinking that these things are exactly the same everywhere. But do all societies look at boys and girls in the same way? We will try and answer this question in this chapter. We will also look at how the different roles assigned to boys and girls prepare them for their future roles as men and women. We will learn that most societies value men and women differently. The roles women play and the work they do are usually valued less than the roles men play and the work they do. This chapter will also examine how inequalities between men and women emerge in the area of work. We also realise that societies make clear distinctions between boys and girls. This begins from a very young age. We are for example, given different toys to play with. Boys are usually given cars to play with and girls dolls. Both toys can be a lot of fun to play with. Why are girls then given dolls and boys cars? Toys become a way of telling children that they will have different futures

when they become men and women. If we think about it, this difference is created in the smallest and most everyday things. How girls must dress, what games boys should play, how girls need to talk softly or boys need to be tough. All these are ways of telling children that they have specific roles to play when they grow up to be men and women. Later in life this affects the subjects we can study or the careers we can choose.

In most societies, including our own, the roles men and women play or the work they do, are not valued equally. Men and women do not have the same status. Let us look at how this difference exists in the work done by men and women.

### Valuing housework

Harmeet's family did not think that the work Jaspreet did within the house was real work. This feeling is not unique to their families. Across the world, the main responsibility for housework and **care-giving** tasks, like looking after the family, especially children, the elderly and sick members, lies with women. Yet, as we have seen, the work that women do within the home is not recognised as work. It is also assumed that this is something that comes naturally to women. It, therefore, does not have to be paid for. And society **devalues** this work.

In fact, what we commonly term as housework actually involves many different tasks. A number of these tasks require heavy physical work. In both rural and urban areas women and girls have to fetch water. In rural areas women and girls carry heavy headloads of firewood. Tasks like washing clothes, cleaning, sweeping and picking up loads require bending, lifting and carrying. Many chores, like cooking, involve standing for long hours in front of hot stoves. The work women do is strenuous and physically demanding — words that we normally associate with men.

Another aspect of housework and care-giving that we do not recognise is that it is very time consuming. In fact, if we add up the housework and the work, women do outside the home, we find that women spend much more time working than men and have much less time for leisure.

### Women's work and equality

As we have seen the low value attached to women's household and care-giving work is not an individual or family matter. It is part of a larger system of inequality between men and women. It, therefore, has to be dealt with through actions not just at the level of the individual or the family but also by the government. As we now know, equality is an important principle of our Constitution. The Constitution says that being male or female should not become a reason for discrimination. In reality, inequality between the sexes exists. The government is, therefore, committed to understanding the reasons for this and taking positive steps to remedy the situation. For example, it recognises that burden of child-care and housework falls on women and girls. This naturally has an impact on whether girls can attend school. It determines whether women can work outside the house and what kind of jobs and careers they can have.

The government has set up anganwadis or child-care centres in several villages in the country. The government has passed laws that make it mandatory for organisations that have more than 30 women employees to provide crèche facilities. The provision of crèches helps many women to take up employment outside the home. It also makes it possible for more girls

to attend schools.

**Important Terms Identity:** Identity is a sense of self-awareness of who one is. **Example:** A person is a girl, sister and a musician. **Double-burden:** Double-burden literally means a double load. This term is commonly used to describe the women's work situation as women typically labour both inside the home (housework) and outside. **Care-giving:** Care-giving refers to a range of tasks related to looking after and nurturing. Besides physical tasks, they also involve a strong emotional aspect. **De-valued:** When some persons are not given due recognition for a task or job they have done, they feel devalued or are considered persons with less value.

**Domestic Help:** Domestic help is either a woman, a girl or a male who works in a household on paid remuneration whether on daily rate or monthly rate. **Toys:** The objects of playing are known as toys.

## Chapter 5 Women Change The World

In the previous chapter, we saw how women's work in the home is not recognised as work. We also read how doing household work and taking care of family members is a full time job and there are no specific hours at which it begins or ends. In this chapter, we will look at work outside the home, and understand how some occupations are seen to be more suitable for men than for women. We will also learn about how women struggle for equality. Getting an education was, and still is, one way in which new opportunities were created for women. This chapter will also briefly trace the different types of efforts made by the women's movement to challenge discrimination in more recent years.

### Fewer opportunities and rigid expectations

A general feeling in society is that outside the home women are good at only certain jobs. For example, many people believe that women make better nurses because they are more patient and gentle. This is linked to women's roles within the family. Similarly, it is believed that science requires a technical mind and girls and women are not capable of dealing with technical things. Because so many people believe in these **stereotypes**, many girls do not get the same support that boys do to study and train to become doctors and engineers. In most families, once girls finish school, they are encouraged by their families to see marriage as their main aim in life.

### Breaking stereotypes

It is important to understand that we live in a society in which all children face pressures from the world around them. Sometimes, these come in the form of demands from adults. At other times, they can just be because of unfair teasing by our own friends. Boys are pressurised to think about getting a job that will pay a good salary. They are also teased and bullied if they do not behave like other boys.

*Ramabai (1858–1922), shown above with her daughter, championed the cause of women's education. She never went to school but learnt to read and write from her parents. She was given the title 'Pandita' because she could read and write Sanskrit, a remarkable achievement as women then were not allowed such knowledge. She went on to set up a Mission in Khedgaon near Pune in 1898, where widows and poor women were encouraged not only to become literate but to be independent. They were taught a variety of skills from carpentry to running a printing press, skills that are not usually taught to girls even today. The printing press can be seen in the picture on the top left corner. Ramabai's Mission is still active today.*



## Learning for change

Going to school is an extremely important part of your life. As more and more children enter school every year, we begin to think that it is normal for all children to go to school. But in the past, the skill of reading and writing was known to only a few. Most children learnt the work their families or elders did. For girls, the situation was worse. In communities that taught sons to read and write, daughters were not allowed to learn the alphabet. Even in families where skills like pottery, weaving and craft were taught, the contribution of daughters and women was only seen as supportive. For example, in the pottery trade, women collected the mud and prepared the earth for the pots. But since they did not operate the wheel, they were not seen as potters.

In the nineteenth century, many new ideas about education and learning emerged. Schools became more common and communities that had never learnt reading and writing started sending their children to school. But there was a lot of opposition to educating girls even then. Yet many women and men made efforts to open schools for girls. Women struggled to learn to read and write.

*Learning to read and write led some women to question the situation of women in society. They wrote stories, letters and autobiographies describing their own experiences of inequality. In their writings, they also imagined new ways of thinking and living for both men and women. Large numbers of girls attend school in India today. Despite this, there continue to be many girls who leave school for reasons of poverty, inadequate schooling facilities and discrimination. Providing equal schooling facilities to children from all communities and class backgrounds, and particularly girls, continues to be a challenge in India.*

## Schooling and education today

Today, both boys and girls attend school in large numbers. Yet, as we will see, there still remain differences between the education of boys and girls. India has a census every 10 years, which counts the whole population of the country. It also gathers detailed information about the people living in India – their age, schooling, what work they do, and so on.

SC and ST girls leave school at a rate that is higher than other category Girls. This means that girls who are from Dalit and Adivasi backgrounds are less likely to remain in school. The 2001 census also found that Muslim girls are less likely, than Dalit and Adivasi girls, to complete primary school. While a Muslim girl is likely to stay in school for around three years, girls from other communities spend around four years in school.

There are several reasons why children from Dalit, Adivasi and Muslim communities leave school. In many parts of the country, especially in rural and poor areas, there may not even be proper schools nor teachers who teach on a regular basis. If a school is not close to people's homes, and there is no transport like buses or vans, parents may not be willing to send their girls to school. Many families are too poor and unable to bear the cost of educating all their children. Boys may get preference in this situation. Many children also leave school because they are discriminated against by their teacher and classmates.

## Women's movement

Women and girls now have the right to study and go to school. There are other spheres – like legal reform, violence and health – where the situation of women and girls has improved. These changes have not happened

automatically. Women individually, and collectively have struggled to bring about these changes. This struggle is known as the Women's Movement. Individual women and women's organisations from different parts of the country are part of the movement. Many men support the women's movement as well. The diversity, passion and efforts of those involved makes it a very vibrant movement. Different strategies have been used to spread awareness, fight discrimination and seek justice. Here are some glimpses of this struggle.

## Campaigning

Campaigns to fight discrimination and violence against women are an important part of the women's movement. Campaigns have also led to new laws being passed. A law was passed in 2006 to give women who face physical and mental violence within their homes, also called domestic violence, some legal protection. Similarly, efforts made by the women's movement led the Supreme Court to formulate guidelines in 1997 to protect women against **sexual harassment** at the workplace and within educational institutions. In the 1980s, for example, women's groups across the country spoke out against 'dowry deaths' — cases of young brides being murdered by their in-laws or husbands, greedy for more dowry. Women's groups spoke out against the failure to bring these cases to justice. They did so by coming on to the streets, approaching the courts, and by sharing information. Eventually, this became a public issue in the newspapers and society, and the dowry laws were changed to punish families who seek dowry.

## Raising Awareness

An important part of the women's movements' work is to raise public awareness on women's rights issues. Their message has been spread through street plays, songs and public meetings.

## Protesting

The women's movement raises its voice when violations against women take place or for example, when a law or policy acts against their interests. Public rallies and demonstrations are a very powerful way of drawing attention to injustices.

## Showing Solidarity

The women's movement is also about showing solidarity with other women and causes.

**Important Terms** **Discrimination:** Discrimination is when we do not treat people equally or with respect due to prejudices. **Sexual Harassment:** Sexual harassment refers to physical or verbal behaviour that is of a sexual nature and against the wishes of a woman. **Stereotype:** When we believe that people belonging to particular groups like religious, economic, regional community are bound to have certain fixed characteristics or can only do a certain type of work, we call them stereotype.

## Chapter 6 Understanding Media

Media is the plural form of the word 'medium' and it describes the various ways through which we communicate in society. Because media refers to all means of communication, everything ranging from a phone call to the evening news on TV can be called media. TV, radio and newspapers are a form of media that reaches millions of people, or the masses, across the country and the world and, thus, they are called mass media.

Television and radio come under **electronic media**. Newspapers and Magazines come under **print media**.

### Media and money

The different technologies that mass media use are expensive. Also, as you read earlier the technologies that mass media use keep changing and so a lot of money is spent on getting the latest technology. Due to these costs, the mass media needs a great deal of money to do its work. As a result, most television channels and newspapers are part of big business houses. Mass media is constantly thinking of ways to make money. One way in which the mass media earns money is by advertising.

### Media and democracy

In a democracy, the media plays a very important role in providing news and discussing events taking place in the country and the world. It is on the basis of this information that citizens can, for example, learn how government works. And often, if they wish to, they can take action on the basis of these news stories. Some of the ways in which they can do this is by writing letters to the concerned minister, organising a **public protest**, starting a signature campaign, asking the government to rethink its programme, etc.

Given the role that the media plays in providing information, it is important that the information be balanced. Many times it is a fact that if you had read single newspaper you would only know one side of the story. A balanced report is one that discusses all points of view of a particular story and then leaves it to the readers to make up their minds.

Writing a balanced report, however, depends on the media being independent. An independent media means that no one should control and influence its coverage of news. No one should tell the media what can be included and what should not be included in a news story. An independent media is important in a democracy. As you read above, it is on the basis of the information that the media provides that we take action as citizens, so it is important that this information is reliable and not biased. *Do you think it is important to know both sides of the story? Why?*

However, the reality is that media is far from independent. This is mainly because of two reasons. The first is the control that the government has on the media. When the government prevents either a news item, or scenes from a movie, or the lyrics of a song from being shared with the larger public, this is referred to as **censorship**. There have been periods in Indian history when the government censored the media. The worst of these was the Emergency between 1975-1977.

While the government does continue to censor films, it does not really censor the media's coverage of news. Despite the absence of censorship by the government, most newspapers nowadays still fail to provide a balanced story. The reasons for this are complicated. Persons who research the media have said that this happens because business houses control the media. At times, it is in the interest of these businesses to focus on only one side of the story. Media's continual need for money and its links to advertising means that it becomes difficult for media to be reporting against people who give them advertisements. Media is, thus, no longer considered independent because of its close links to business.

Besides the above, the media also tends to focus on a particular aspect of a story because they believe this makes the story interesting. Also, if they want to increase public support for an issue, they often do this by focusing on one side of a story.

### Setting agendas

The media also plays an important role in deciding what stories to focus on, and therefore, decides on what is newsworthy. For example, the annual function at your school is unlikely to make the news. But if a famous actor is invited as the Chief Guest, then the media might be interested in covering it. By focusing on particular issues, the media influences our thoughts, feelings and actions, and brings those issues to our attention. Due to the significant influence it plays in our lives and in shaping our thoughts, it is commonly said that the media 'sets the agenda'.

Very recently, the media drew our attention to alarming levels of pesticides in cola drinks. They **published** reports that indicated the high level of pesticides and, thus, made us aware of the need to regularly monitor these colas according to international quality and safety standards. They did this despite the government's resistance by boldly declaring that colas were unsafe. In covering this story, the media positively helped us focus on an issue that affects our lives and one that we might not even have been aware of it had it not been for media reporting.

*What is the consequence of the media 'setting the agenda' by reporting on the Fashion Week rather than the slum demolitions? Can you think of an issue that does not seem important to you because it is never featured in the media?*

There are several instances when the media fails to focus on issues that are significant in our lives. For example, drinking water is a major problem in the country. Every year, thousands of people suffer and die because they do not get safe drinking water. However, we seldom find the media discussing this issue. A well-known Indian journalist wrote of how the Fashion Week, in which clothes designers show their new creations to rich people, formed the front page headlines of all the newspapers while several slums were being demolished in Mumbai, the very same week, and this was not even noticed.

### Local media

Recognising that the media will not be interested in covering 'small' issues that involve ordinary people and their daily lives, several local groups have come forward to start their own media. Several people use community radio to tell farmers about the prices of different crops and advise them on the use of seeds and fertilisers. Others make documentary films with fairly cheap and easily available video cameras on real-life conditions faced by different poor communities, and, at times, have even given the poor these video cameras to make films on their own lives.

As citizens of a democracy, the media has a very important role to play in our lives because it is through the media that we hear about issues related to the working of the government. The media decides what to focus on and in this way it 'sets the agenda'. The government can, at times, prevent the media from publishing a story and this is called censorship. Nowadays, media's close relationship with business often means that a balanced report is difficult to come by. Given this, it is important for us to be aware that the 'factual information' that a news report provides is often not complete and can be one-sided. We, therefore, need to analyse the news by asking the following questions: what is the information I am learning from this report? What information is not being provided? From whose point of view is the article being written? Whose point of view is being left out and why?

**Important Terms Advertising:** Advertising is the positive propagation of a product or service through newspapers, radio, television, magazines, websites, internet, etc. **Branding:** Branding means stamping a product with a particular name or sign. **Manufacturer:** One who gets things made is termed as a manufacturer. **Ad:** Ad stands for advertising or advertisement. **Social Advertisements:** Social advertisements refer to advertisements made by the state or private agencies, which have larger message for the society. **Product:** Product refers to a thing or service that is made for sale in the market. **Consumer:** Consumer refers to the person for whom goods or products are made and who pays money to buy and use them. **Brand:** Brand refers to a special identification or name that is associated with a product created through the process of advertising. **Lifestyle:** Lifestyle refers to people's lives being identified by the products they own the clothes they wear, the places they eat in, etc.

## Chapter 7 Advertisements

Today we are surrounded by advertisements or ads as we call them. We watch these on television, listen to them on radio, see them on the streets and in newspapers and magazines. Even taxis and rickshaws carry advertisements on them. When we go to cinemas, we see advertisements before the film begins and on the Internet, they often pop-up when we go into different websites. What do advertisements do? How do they attract our attention?

Advertisements draw our attention to various **products** and describe them positively so that we become interested in buying them. In this chapter, we will focus on the two advertisements that you see above to understand what advertising does and how it works.

### Building brands and brand values

Have you ever heard of the word **brand**? Advertising is all about building brands. At a very basic level, 'branding' means stamping a product with a particular name or sign. This is done in order to differentiate it from other products in the market.

### Brand values and social values

Advertisements are an important part of our social and cultural life today. We watch advertisements, discuss them and often judge people according to the brand products they use. Given that advertisements are such a powerful source of influence in our lives, we need to be able to understand the ways in which they work. Advertisers often target our personal emotions. By linking our personal emotions to products, advertisements tend to influence the ways in which we value ourselves as persons. Often several of our cricket heroes and our favourite film stars also try and sell products to us through advertisements. We may feel tempted to buy these products because persons whom we consider our heroes tell us that they are worth buying. In addition, advertisements often show us images of the **lifestyles** of rich people and seldom show us the reality of peoples' lives that we see around us. Advertisements play a big role in our lives. We not only buy products based on them, but often, having certain brand products influences the ways in which we think about ourselves, our friends and our family. It is, therefore, important to know how advertising works and understand what it does before we choose to buy the products that advertisements sell. We need to be able to critically understand why they use particular images, the personal emotion that they are appealing to and the ways in which this affects how we think about

ourselves when we use the product or are not able to buy it.

### Advertising and democracy

There are various ways in which advertising links to issues of equality in a democratic society. Advertising a product costs a lot of money. Usually, crores of rupees are spent advertising a brand. Producing and showing advertisements in the media is very expensive. Because there are so many advertisements in the market today, companies have to show the advertisement again and again to have it stick in people's minds.

What this often means is that only large companies can advertise. If you own a small business, you will not have the money to show your product on TV or national newspapers and magazines. So, persons who sell papad, pickles, sweets and jams that they have made at home are not considered as fashionable as brand products. They often have to sell their products in weekly markets and neighbourhood shops that you will read about in the following unit.

### Social advertising

Social Advertisements refer to advertisements made by the State or private agencies that have a larger message for society. In a democracy in which all people are equal and should be able to lead a life of dignity, advertising tends to promote a certain lack of respect for the poor. They are not the faces we most often see in advertisements and so we tend to dismiss their lives as worthless.

Advertising, because it appeals to personal emotions also tends to make people who cannot afford certain brands feel bad. They feel that they are unable to give their loved ones the best care that brand products appear to offer.

Advertising by focusing on the lives of the rich and famous helps us forget about issues of poverty, discrimination and dignity, all of which are central to the functioning of equality in a democracy. More than just selling us products, advertisements tell us how we should live our lives, what we should aspire and dream for, how we should express our love, what it means to be smart, successful and beautiful. As citizens of a democratic society, it is important for us to be aware of the strong influence that advertising has on our lives. By critically understanding what advertisements do, we can make better decisions about whether we wish to buy a product or not.

## Chapter 8 Markets Around Us

### Quick Review

Markets are the places where people buy goods and services.

- There are different kinds of markets namely; weekly market, shops, shopping complex or mall.
- Weekly markets are held on different places on a fix day of a week. Such markets do not have permanent shops.
- Shops may be permanent or hawker type. They provide different goods and sometimes even on credit.
- Malls sell branded and non branded goods and invest a huge amount of money in their shops.
- Products are sold through chain of markets—The big factories to wholesaler and finally the retail outlets.
- In present times, goods are also sold by online marketing and home delivery.
- There are many products that are not visible and are



called services like that of a doctor.

### Market and equality

The profit earned by different market varies. It depends on type of investment made by seller and buying capacity of the customer.

So everyone does not gain equally in the market. In democracy everybody has right to earn a fair wage for his work. If people don't earn enough then they cannot think themselves as equal to others and cannot live with dignity. The market offers people opportunities to work and earn fairly. But it is the people, who are rich, powerful and have large establishments take away the maximum benefit. And the poor people, because of their dependence on the rich, are exploited in the market.

**Important Terms Chain of Markets:** A series of markets that are connected like links in a chain because products pass from one market to another, is termed as chain of markets.

**Hawkers:** Traders who sell their goods by loudly telling about their goods on carts or on their head or selling on roadsides are called hawkers. **Weekly Market:** Weekly Markets are those markets which are held on a particular day of the week at a particular place selling almost everything that a household needs, ranging from vegetables to clothes and to utensils.

**Mall:** Mall is an enclosed shopping space in a large building with many floors that has shops, restaurants and at times even a cinema theatre, most often selling branded products.

**Wholesale:** Wholesale refers to buying and selling of goods in large quantities, such as vegetables, fruits, flowers etc.

## Chapter 9 A Shirt In The Market

### Quick Review

Cultivation of **cotton** is very expensive and a difficult task. In spite of hard labour farmers never get a fair price. In a chain of buyers and sellers, the actual producers of the goods stand to lose.

**Weavers** depend on merchants for the raw materials and markets. The arrangement between the merchant and the weaver is termed as **putting-out system**.

**Putting-out System:** Putting-out system is defined as the system in which weavers weave clothes at their homes, with the help of their family members and charge wages from the merchant who has given them thread for weaving cloth.

### Advantages and disadvantages of the 'Putting-OUT System'

**Advantages for weaver:** (i) They do not have to spend money for purchasing yarn and know what and how much cloth they have to make (ii) They do not face the problem of selling the finished cloth.

**Disadvantages for the weaver** (i) They are dependent on the merchant for raw material as well as market (ii) They get low wages. They do not know from whom they are making the cloth (iii) They do not know the market price of the cloth.

### Weaver's cooperative

We have seen that the weavers are paid very little by the merchant under the putting out system. Weaver's cooperatives are one way to reduce the dependence on the merchant and to earn a higher income for the weavers. In a cooperative, people with common interests come together and work for their mutual benefit. In a weaver's cooperative, the weavers form a group and take up certain activities collectively. They procure yarn from the yarn dealer and distribute it among the weavers. The cooperative also does the marketing. So, the role of the merchant is reduced, and weavers get a fair price on the cloth.

At times, the government helps the cooperatives by buying cloth from them at a reasonable price. For instance, the Tamil Nadu government runs a Free School Uniform programme in the state. The government procures the cloth for this programme from the powerloom weaver's cooperatives. Similarly, the government buys cloth from the handloom weaver's cooperatives and sells it through stores known as Co-optex. You might have come across one of these stores in your town.

## Chapter 10 Struggles For Equality

As you have already read in this book, the Indian Constitution recognises all Indians as equal before the law and states that no person can be discriminated against because of their religion, sex, caste or whether they are rich or poor. All adults in India have the equal right to vote during elections and this 'power over the ballot box' has been used by people to elect or replace their representatives.

*What do you think is meant by the expression 'power over the ballot box'? Poverty and the lack of resources continue to be a key reason why so many people's lives in India are highly unequal. Discrimination on the basis of a person's religion, caste and sex is another significant factor for why people are treated unequally in India.*

*In India, it is the case that the poor consist of a majority of members of Dalit, Adivasi and Muslim communities and are often women. According to the 2001 Census data women form 48 per cent of the population, Muslims form 13 per cent of the population, Dalits form 16 per cent and Adivasis 8 per cent.*

Often, poverty and lack of dignity and respect for certain communities and groups come together in such powerful ways that it is difficult to identify where one aspect of inequality ends and the other begins. As you have read, Dalit, Adivasi and Muslim girls drop out of school in large numbers. This is a combined outcome of poverty, social discrimination and the lack of good quality school facilities for these communities.

### Struggles for equality

Throughout the world – in every community, village, city and town—you will find that there are some people who are known and respected because of their fight for equality. These people may have stood up against an act of discrimination that they faced or which they witnessed. Or they may be well-respected because they treat all persons with dignity and are, therefore, trusted and called upon to resolve issues in the community.

**Tawa Matsya Sangh (TMS)** a federation of fishworker's cooperatives—an organisation, is fighting for the rights of displaced forest dwellers of the Satpura forest in the Madhya Pradesh. With the TMS taking over the fishworkers were able to increase their earnings substantially. TMS set up **cooperatives** to end up the exploitation of fish workers.

Often, some of these persons become more widely recognised because they have the support or represent large numbers of people who have united to address a particular issue of inequality. In India, there are several struggles in which people have come together to fight for issues that they believe are important. The Tawa Matsya Sangh in Madhya Pradesh is another example of people coming together to fight for an issue. There are

many such struggles such as those among beedi workers, fisherfolk, agricultural labourers, slum dwellers and each group is struggling for justice in its own way. There are also many attempts to form cooperatives or other collective ways by which people can have more control over resources.

### **Creative expression against inequality**

While some join protest movements to fight inequality,

others might use their pen, or their voice, or their ability to dance to draw attention to issues of inequality. Writers, singers, dancers and artists have also been very active in the fight against inequality. Often, poems, songs and stories can also inspire us and make us believe strongly in an issue and influence our efforts to correct the situation.

# NCERT Class 8

## Polity Social & Political Life 3

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 The Indian Constitution

Have you ever wondered why we need a Constitution or been curious about how the Constitution got written, or who wrote it? In this chapter, we will discuss both these issues and also look at the key features of the Indian Constitution. Each of these features is crucial to the working of democracy in India and some of these will be the focus of different chapters in this book.

#### Why Does a Country Need a Constitution?

Today most countries in the world have a Constitution. While all democratic countries are likely to have a Constitution, it is not necessary that all countries that have a Constitution are democratic. The Constitution serves several purposes. First, it lays out certain ideals that form the basis of the kind of country that we as citizens aspire to live in. Or, put another way, a Constitution tells us what the fundamental nature of our society is. A country is usually made up of different communities of people who share certain beliefs but may not necessarily agree on all issues. A Constitution helps serve as a set of rules and principles that all persons in a country can agree upon as the basis of the way in which they want the country to be governed. This includes not only the type of government but also an agreement on certain ideals that they all believe the country should uphold.

*In 1934, the Indian National Congress made the demand for a Constituent Assembly. During the Second World War, this assertion for an independent Constituent Assembly formed only of Indians gained momentum and this was convened in December 1946. The photo on page 2 shows some members of the Constituent Assembly. Between December 1946 and November 1949, the Constituent Assembly drafted a constitution for independent India. Free to shape their destiny at last, after 150 years of British rule, the members of the Constituent Assembly approached this task with the great idealism that the freedom struggle had helped produce..*

The second important purpose of a Constitution is to define the nature of a country's political system. For example, Nepal's earlier Constitution stated that the country was to be ruled by the King and his council of ministers. In countries that have adopted a democratic form of government or **polity**, the Constitution plays a crucial role in laying out certain important guidelines that govern decision-making within these societies. In a democracy, we choose our leaders so that they can exercise power responsibly on our behalf. However, there is always the possibility that these leaders might misuse their authority and the Constitution usually provides safeguards against this. This misuse of authority can result in gross injustice as demonstrated in the classroom situation below:

In democratic societies, the Constitution often lays

down rules that guard against this misuse of authority by our political leaders. In the case of the Indian Constitution, about which you will read more later in this chapter, many of these laws are contained in the section on Fundamental Rights. You read about how the Indian Constitution guarantees the right to equality to all persons and says that no citizen can be discriminated against on grounds of religion, race, caste, gender, and place of birth. The Right to Equality is one of the Fundamental Rights guaranteed by the Indian Constitution.

Another important function that a Constitution plays in a democracy is to ensure that a dominant group does not use its power against other, less powerful people or groups. The storyboard below demonstrates one such situation in the classroom.

Such unhealthy situations can occur in democratic societies too, where a majority can continuously enforce decisions that exclude minorities and go against their interests. As the above storyboard illustrates, every society is prone to this tyranny of the majority. The Constitution usually contains rules that ensure that minorities are not excluded from anything that is routinely available to the majority. Another reason why we have a Constitution is precisely to prevent this tyranny or domination by the majority of a minority. This can refer to one community dominating another, i.e. inter-community domination, or members of one community dominating others within the same community, i.e. intra-community domination.

The third significant reason why we need a Constitution is to save us from ourselves. This may sound strange but what is meant by this is that we might at times feel strongly about an issue that might go against our larger interests and the Constitution helps us guard against this. Similarly, the Constitution helps to protect us against certain decisions that we might take that could have an adverse effect on the larger principles that the country believes in. For example, it is possible that many people who live in a democracy might come to strongly feel that party politics has become so acrimonious that we need a strong dictator to set this right. Swept by this emotion, they may not realise that in the long run, dictatorial rule goes against all their interests. A good Constitution does not allow these whims to change its basic structure. It does not allow for the easy overthrow of provisions that guarantee rights of citizens and protect their freedom.

Now let us try and understand the ways in which the above points get translated into certain ideals and rules by studying some key features of the Indian Constitution.

#### The Indian Constitution: Key Features

By the beginning of the twentieth century, the **Indian national movement** had been active in the struggle for independence from British rule for several decades. During the freedom struggle the nationalists had



devoted a great deal of time to imagining and planning what a free India would be like. Under the British, they had been forced to obey rules that they had had very little role in making. The long experience of authoritarian rule under the colonial state convinced Indians that free India should be a democracy in which everyone should be treated equally and be allowed to participate in government. What remained to be done then was to work out the ways in which a democratic government would be set up in India and the rules that would determine its functioning. This was done not by one person but by a group of around 300 people who became members of the Constituent Assembly in 1946 and who met periodically for the next three years to write India's Constitution.

These members of the Constituent Assembly had a huge task before them. The country was made up of several different communities who spoke different languages, belonged to different religions, and had distinct cultures. Also, when the Constitution was being written, India was going through considerable turmoil. The partition of the country into India and Pakistan was imminent, some of the Princely States remained undecided about their future, and the socio-economic condition of the vast mass of people appeared dismal. All of these issues played on the minds of the members of the Constituent Assembly as they drafted the Constitution. They rose to the occasion and gave this country a visionary document that reflects a respect for maintaining diversity while preserving national unity. The final document also reflects their concern for eradicating poverty through socio-economic reforms as well as emphasising the crucial role the people can play in choosing their representatives.

Listed below are the key features of the Indian Constitution. While reading these, keep in mind the above-mentioned concerns of diversity, unity, socio-economic reform and representation that the authors of this document were grappling with. Try and understand the ways in which they tried to balance these concerns with their commitment to transforming independent India into a strong, democratic society.

**1. Federalism:** This refers to the existence of more than one level of government in the country.. The vast number of communities in India meant that a system of government needed to be devised that did not involve only persons sitting in the capital city of New Delhi and making decisions for everyone. Instead, it was important to have another level of government in the states so that decisions could be made for that particular area. While each state in India enjoys autonomy in exercising powers on certain issues, subjects of national concern require that all of these states follow the laws of the central government. The Constitution contains lists that detail the issues that each tier of government can make laws on. In addition, the Constitution also specifies where each tier of government can get the money from for the work that it does. Under federalism, the states are not merely agents of the federal government but draw their authority from the Constitution as well. All persons in India are governed by laws and policies made by each of these levels of government.

**2. Parliamentary Form of Government:** The different tiers of government that you just read about consist of representatives who are elected by the people. The Constitution of India guarantees universal adult suffrage for all citizens. When they were making the Constitution, the members of the Constituent

Assembly felt that the freedom struggle had prepared the masses for universal adult suffrage and that this would help encourage a democratic mindset and break the clutches of traditional caste, class and gender hierarchies. This means that the people of India have a direct role in electing their representatives. Also, every citizen of the country, irrespective of his/her social background, can also contest in elections. These representatives are accountable to the people. You will read more about why representation is crucial to democratic functioning in Unit 2 of this book.

**3. Separation of Powers:** According to the Constitution, there are three organs of government. These are the legislature, the executive and the judiciary. The legislature refers to our elected representatives. The executive is a smaller group of people who are responsible for implementing laws and running the government. The judiciary, of which you will read more in Unit 3 of this book, refers to the system of courts in this country. In order to prevent the misuse of power by any one branch of government, the Constitution says that each of these organs should exercise different powers. Through this, each organ acts as a check on the other organs of government and this ensures the balance of power between all three. The word 'State' is often used in this chapter. This does NOT refer to state governments. Rather when we use State, we are trying to distinguish it from 'government'. 'Government' is responsible for administering and enforcing laws. The government can change with elections. The State on the other hand refers to a political institution that represents a sovereign people who occupy a definite territory. We can, thus, speak of the Indian State, the Nepali State etc. The Indian State has a democratic form of government. The government (or the executive) is one part of the State. The State refers to more than just the government and cannot be used interchangeably with it.

*Members of the Constituent Assembly feared that the executive might become too strong and ignore its responsibility to the legislature. The Assembly, therefore, included a number of provisions in the Constitution to limit and control the action taken by the executive branch of government as a whole.*

*Baba Saheb Dr Ambedkar is known as the Father of the Indian Constitution. Dr Ambedkar believed that his participation in the Constituent Assembly helped the scheduled castes get some safeguards in the draft constitution. But he also stated that although the laws might exist, scheduled castes still had reason to fear because the administration of these laws were in the hands of 'caste Hindu officers'. He, therefore, urged scheduled castes to join the government as well as the civil services.*

*When the Constituent Assembly adopted the principle of universal adult franchise, Shri A.K. Ayyar, a member, remarked that this was done, "with an abundant faith in the common man and the ultimate success of democratic rule, and in the full belief that the introduction of democratic government on the basis of adult suffrage will bring enlightenment and promote the well-being, the standard of life, the comfort, and the decent living of the common man".*

**The Fundamental Rights in the Indian Constitution include:**

**1. Right to Equality:** All persons are equal before the law. This means that all persons shall be equally protected by the laws of the country. It also states that no citizen can be discriminated against on the basis of

their religion, caste or sex. Every person has access to all public places including playgrounds, hotels, shops etc. The State cannot discriminate against anyone in matters of employment. But there are exceptions to this that you will read about later in this book. The practice of untouchability has also been abolished.

**2. Right to Freedom:** This includes the right to freedom of speech and expression, the right to form associations, the right to move freely and reside in any part of the country, and the right to practise any profession, occupation or business.

**3. Right against Exploitation:** The Constitution prohibits human trafficking, forced labour, and employment of children under 14 years of age.

**4. Right to Freedom of Religion:** Religious freedom is provided to all citizens. Every person has the right to practise, profess and propagate the religion of their choice.

**5. Cultural and Educational Rights:** The Constitution states that all minorities, religious or linguistic, can set up their own educational institutions in order to preserve and develop their own culture.

**6. Right to Constitutional Remedies:** This allows citizens to move the court if they believe that any of their Fundamental Rights have been violated by the State.

**4. Fundamental Rights:** The section on Fundamental Rights has often been referred to as the 'conscience' of the Indian Constitution. Colonial rule had created a certain suspicion of the State in the minds of the nationalists and they wanted to ensure that a set of written rights would guard against the misuse of State power in independent India. Fundamental Rights, therefore, protect citizens against the **arbitrary** and absolute exercise of power by the State. The Constitution, thus, guarantees the rights of individuals against the State as well as against other individuals. Moreover, the various minority communities also expressed the need for the Constitution to include rights that would protect their groups. The Constitution, therefore, also guarantees the rights of minorities against the majority. As

Dr Ambedkar has said about these Fundamental Rights, their object is two-fold. The first objective is that every citizen must be in a position to claim those rights. And secondly, these rights must be binding upon every authority that has got the power to make laws. In addition to Fundamental Rights, the Constitution also has a section called Directive Principles of State Policy. This section was designed by the members of the Constituent Assembly to ensure greater social and economic reforms, and to serve as a guide to the independent Indian State to institute laws and policies that help reduce the poverty of the masses.

**5. Secularism:** A secular state is one in which the state does not officially promote any one religion as the state religion.

**Important Terms Democracy:** A form of government in which people largely hold the power of governance. The representatives of people constitute the government and undertake the constitutional responsibilities for the purpose of achieving the ideals of the constitution. **Constitution:** Constitution is usually a written document, containing the rules of governing a sovereign nation state. **Ideal:** A goal or a principle in its ideal form. **Tyranny:** Cruel and unfair use of power. **Consensus:** Agreement of all individuals on some issue. **Equality:** The state of being equal in all respects. **Sovereignty:** Independent people. **Fundamental Rights:** Those rights which ensure a respectable and honoured life to all the citizens living in its jurisdiction. **Federalism:** Existence

of more than one level of government in a nation. **Arbitrary:** When nothing is fixed and is instead left to one's judgment or choice. This can be used to refer to rules that are not fixed, or decisions that have no basis etc. **Human Trafficking:** The practice of the buying and selling of illegal trade in human beings, particularly women and children.

## Chapter 2 Understanding Secularism

A country which does not officially promote any religion as its country's religion, is a secular country. India is one of them.

Imagine yourself as a Hindu or Muslim living in a part of the United States of America where Christian fundamentalism is very powerful. Suppose that despite being a US citizen, no one is willing to rent their house to you. How would this make you feel? Would it not make you feel resentful? What if you decided to complain against this discrimination and were told to go back to India. Would this not make you feel angry? Your anger could take two forms. First, you might react by saying that Christians should get the same treatment in places where Hindus and Muslims are in a majority. This is a form of retaliation. Or, you might take the view that there should be justice for all. You may fight, stating that no one should be discriminated against on grounds of their religious practices and beliefs. This statement rests on the assumption that all forms of domination related to religion should end. This is the essence of secularism. In this chapter, you will read more about what this means in the Indian context.

History provides us with many examples of discrimination, exclusion and persecution on the grounds of religion. You may have read about how Jews were persecuted in Hitler's Germany and how several millions were killed. Now, however, the Jewish State of Israel treats its own Muslim and Christian minorities quite badly. In Saudi Arabia, non-Muslims are not allowed to build a temple, church etc., and nor can they gather in a public place for prayers.

In all of the above examples, members of one religious community either persecute or discriminate against members of other religious communities. These acts of discrimination take place more easily when one religion is given official recognition by the State at the expense of other religions. Clearly no one would wish to be discriminated against, because of their religion nor dominated by another religion. In India, can the State discriminate against citizens on the grounds of their religion?

### What is Secularism?

The Indian Constitution allows individuals the freedom to live by their religious beliefs and practices as they interpret these. In keeping with this idea of religious freedom for all, India also adopted a strategy of separating the power of religion and the power of the State. Secularism refers to this separation of religion from the State.

### Why is it Important to Separate Religion from the State?

As discussed above, the most important aspect of secularism is its separation of religion from State power. This is important for a country to function democratically. Almost all countries of the world will have more than one religious group living in them. Within these religious groups, there will most likely be one group that is in a majority. If this majority religious group has access to State power, then it could quite

easily use this power and financial resources to discriminate against and persecute persons of other religions. This tyranny of the majority could result in the discrimination, **coercion** and at times even the killing of religious minorities. The majority could quite easily prevent minorities from practising their religions. Any form of domination based on religion is in violation of the rights that a democratic society guarantees to each and every citizen irrespective of their religion. Therefore, the tyranny of the majority and the violation of Fundamental Rights that can result is one reason why it is important to separate the State and religion in democratic societies.

Another reason that it is important to separate religion from the State in democratic societies is because we also need to protect the freedom of individuals to exit from their religion, embrace another religion or have the **freedom to interpret** religious teachings differently. To understand this point better, let us take the practice of untouchability. You might feel that you dislike this practice within Hinduism and therefore, you want to try and reform it. However, if State power were in the hands of those Hindus who support untouchability, then do you think that you would have an easy task to try and change this? Even if you were part of the dominant religious group, you might face a lot of resistance from fellow members of your community. These members who have control of State power might say that there is only one interpretation of Hinduism and that you do not have the freedom to interpret this differently.

#### What is Indian Secularism?

The Indian Constitution mandates that the Indian State be secular. According to the Constitution, only a secular State can realise its objectives to ensure the following:

1. that one religious community does not dominate another;
2. that some members do not dominate other members of the same religious community;
3. that the State does not enforce any particular religion nor take away the religious freedom of individuals.

The Indian State works in various ways to prevent the above domination. First, it uses a strategy of distancing itself from religion. The Indian State is not ruled by a religious group and nor does it support any one religion. In India, government spaces like law courts, police stations, government schools and offices are not supposed to display or promote any one religion. The second way in which Indian secularism works to prevent the above domination is through a strategy of non-interference. This means that in order to respect the sentiments of all religions and not interfere with religious practices, the State makes certain exceptions for particular religious communities.

The third way in which Indian secularism works to prevent the domination listed earlier is through a strategy of intervention. You read earlier in this chapter about untouchability. This is a good example where members of the same religion ('upper-caste' Hindus) dominate other members (some 'lower castes') within it. In order to prevent this religion-based exclusion and discrimination of 'lower castes', the Indian Constitution bans untouchability. In this instance, the State is intervening in religion in order to end a social practice that it believes discriminates and excludes, and that violates the Fundamental Rights of 'lower castes' who are citizens of this country. Similarly, to ensure that laws relating to equal inheritance rights are respected, the State may have to **intervene** in the religion-based 'personal laws' of communities.

The intervention of the State can also be in the form of support. The Indian Constitution grants the right to religious communities to set up their own schools and colleges. It also gives them financial aid on a non-preferential basis.

Some of the above objectives are similar to those that have been included in the Constitutions of secular democratic countries in other parts of the world. For example, the First Amendment of the U.S. Constitution prohibits the legislature from making laws "respecting an establishment of religion" or that "prohibit the free exercise of religion". What is meant by the word 'establishment' is that the legislature cannot declare any religion as the official religion. Nor can they give preference to one religion. In the U.S.A. the separation between State and religion means that neither the State nor religion can interfere in the affairs of one another. There is one significant way in which Indian secularism differs from the dominant understanding of secularism as practised in the United States of America. This is because unlike the strict separation between religion and the State in American secularism, in Indian secularism the State can intervene in religious affairs. You have read about how the Indian Constitution intervened in Hindu religious practices in order to abolish untouchability. In Indian secularism, though the State is not strictly separate from religion it does maintain a principled distance vis-à-vis religion. This means that any interference in religion by the State has to be based on the ideals laid out in the Constitution. These ideals serve as the standard through which we can judge whether the State is or is not behaving according to secular principles.

The Indian State is secular and works in various ways to prevent religious domination. The Indian Constitution guarantees Fundamental Rights that are based on these secular principles. However, this is not to say that there is no violation of these rights in Indian society. Indeed it is precisely because such violations happen frequently that we need a constitutional mechanism to prevent them from happening. The knowledge that such rights exist makes us sensitive to their violations and enables us to take action when these violations take place.

**Important Terms Secularism:** This refers to separation of religion from the state. **Coercion:** Forcing someone to do something. In context of this chapter, it refers to the force exercised by a legal authority such as the state. **Intervene:** In this chapter, the term refers to the state's efforts to influence some matter according to the principles of the constitution. **Freedom to interpret:** This refers to freedom that all the individuals may interpret things in their own way. In this chapter, it refers to the liberty of the individuals to develop their own understanding and meaning of the religion they practice.

## Chapter 3

### Why Do We Need A Parliament?

We in India pride ourselves on being a democracy. Here we will try and understand the relation between the ideas of participation in decision-making and the need for all democratic governments to have the consent of their citizens.

It is these elements that together make us a democracy and this is best expressed in the institution of the Parliament. In this chapter, we will try to see how the Parliament enables citizens of India to participate in decision making and control the government, thus making it the most important symbol of Indian democracy and a key feature of the Constitution.



### Why should People Decide?

India, as we know, became independent on 15 August 1947. Preceding this was a long and difficult struggle in which many sections of society participated. People from various backgrounds joined the struggle and they were inspired by the ideas of freedom, equality and participation in decision-making. Under colonial rule, the people had lived in fear of the British government and did not agree with many of the decisions that they took. But they faced grave danger if they tried to criticise these decisions. The freedom movement changed this situation. The nationalists began to openly criticise the British government and make demands. As far back as 1885, the Indian National Congress demanded that there be elected members in the legislature with a right to discuss the budget and ask questions. The Government of India Act 1909, allowed for some elected representation. While these early legislatures under the British government were in response to the growing demands of the nationalists, they did not allow for all adults to vote nor could people participate in decision making. With the coming of independence, we were going to be citizens of a free country. The dreams and aspirations of the freedom struggle were made concrete in the Constitution of independent India that laid down the principle of universal adult franchise, i.e. that all adult citizens of the country have the right to vote.

*EVMs were used throughout the country for the first time in the 2004 general elections. The use of EVMs in 2004 saved around 1,50,000 trees which would have been cut to produce about 8,000 tons of paper for printing the ballot papers.*

### People and their Representatives

The take-off point for a democracy is the idea of consent, i.e. the desire, **approval** and participation of people. It is the decision of people that creates a democratic government and decides about its functioning. The basic idea in this kind of democracy is that the individual or the citizen is the most important person and that in principle the government as well as other public institutions need to have the trust of these citizens.

How does the individual give approval to the government? One way of doing so, as you read, is through elections. People would elect their representatives to the Parliament, then, one group from among these elected representatives forms the government. The Parliament, which is made up of all representatives together, controls and guides the government. In this sense people, through their chosen representatives, form the government and also control it.

### The Role of the Parliament

Created after 1947, the Indian Parliament is an expression of the faith that the people of India have in principles of democracy. These are participation by people in the decision-making process and government by consent. The Parliament in our system has immense powers because it is the representative of the people. Elections to the Parliament are held in a similar manner as they are for the state legislature. The Lok Sabha is usually elected once every five years. The country is divided into numerous constituencies. Each of these constituencies elects one person to the Parliament. The candidates who contest elections usually belong to different political parties. Once elected, these candidates become Members of Parliament or MPs.

These MPs together make up the Parliament. *Once elections to the Parliament have taken place, the Parliament needs to perform the following functions:*

#### A. To Select the National Government

Parliament of India consists of the President, the Rajya Sabha and the Lok Sabha. After the Lok Sabha elections, a list is prepared showing how many MPs belong to each political party. For a political party to form the government, they must have a majority of elected MPs. Since there are 543 elected (plus 2 Anglo-Indian nominated) members in Lok Sabha, to have a majority a party should have at least half the number i.e. 272 members or more. The Opposition in Parliament is formed by all the political parties that oppose the majority party/coalition formed. The largest amongst these parties is called the Opposition party.

One of the most important functions of the Lok Sabha is to select the executive. The executive, as you read in Chapter 1, is a group of persons who work together to implement the laws made by the Parliament. This executive is often what we have in mind when we use the term government.

The Prime Minister of India is the leader of the ruling party in the Lok Sabha. From the MPs who belong to her party, the Prime Minister selects ministers to work with her to implement decisions. These ministers then take charge of different areas of government functioning like health, education, finance etc.

Often times in the recent past it has been difficult for a single political party to get the majority that is required to form the government. They then join together with different political parties who are interested in similar concerns to form what is known as a coalition government.

The Rajya Sabha functions primarily as the representative of the states of India in the Parliament. The Rajya Sabha can also initiate legislation and a bill is required to pass through the Rajya Sabha in order to become a law. It, therefore, has an important role of reviewing and altering (if alterations are needed) the laws initiated by the Lok Sabha. The members of the Rajya Sabha are elected by the elected members of the Legislative Assemblies of various states. There are 233 elected members plus 12 members nominated by the President.

#### B. To Control, Guide and Inform the Government

The Parliament, while in session, begins with a **box hour**. The box hour is an important mechanism through which MPs can elicit information about the working of the government. This is a very important way through which the Parliament controls the executive. By asking questions the government is alerted to its shortcomings, and also comes to know the opinion of the people through their representatives in the Parliament, i.e. the MPs. Asking questions of the government is a crucial task for every MP. The Opposition parties play a critical role in the healthy functioning of a democracy. They highlight drawbacks in various policies and programmes of the government and mobilise popular support for their own policies. The government gets valuable feedback and is kept on its toes by the questions asked by the MPs. In addition, in all matters dealing with finances, the Parliament's approval is crucial for the government. This is one of the several ways in which the Parliament controls, guides and informs the government. The MPs as representatives of the people have a central role in controlling, guiding and informing Parliament and this is a key aspect of the functioning of Indian democracy.

### C. Law-Making

Law-making is a significant function of Parliament. We shall read about this in the next chapter.

#### Who are the People in Parliament?

Parliament now has more and more people from different backgrounds. For example, there are more rural members as also members from many regional parties. Groups and peoples that were till now unrepresented are beginning to get elected to Parliament.

It has been observed that representative democracy cannot produce a perfect reflection of society. There is a realisation that when interests and experiences separate us it is important to ensure that communities that have been historically marginalised are given adequate representation. With this in mind, some seats are reserved in Parliament for SCs and STs. This has been done so that the MPs elected from these constituencies will be familiar with and can represent Dalit and Adivasi interests in Parliament.

Similarly, it has more recently been suggested that there should be reservation of seats for women. This issue is still being debated. Sixty years ago, only four per cent of MPs were women and today it is just above nine per cent. This is a small share when you consider the fact that half the population are women.

It is issues of this kind that force the country to ask certain difficult and often unresolved questions about whether our democratic system is representative enough. The fact that we can ask these questions and are working towards answers is a reflection of the strength and the faith that people in India have in a democratic form of government.

**Important Terms Parliament:** The Parliament of India constitutes the President, the Rajya Sabha and the Lok Sabha. Also known as Sansad, our Parliament is the highest law making body in the nation. **Rajya Sabha:** It is also known as the Council of States and has a maximum strength of 250 members. The Vice President is the ex-officio chairman of the Rajya Sabha. **Lok Sabha:** It is also known as the House of People and its total number of members is 545. The Speaker presides upon the Lok Sabha. **EVM:** This stands for Electronic Voting Machine. **Approval:** This refers to the formal consent of the elected representatives that the Parliament continues to enjoy the people's trust. **Representative:** The individual who is elected by the people. **Coalition:** In case if one party does not get majority, then a group of political parties form coalition and elect a leader to form the government. Such government is known as coalition government.

## Chapter 4 Understanding Laws

You may be familiar with some laws such as those that specify the age of marriage, the age at which a person can vote, and perhaps even the laws dealing with buying and selling of property. We now know that the Parliament is in charge of making laws. Do these laws apply to everyone? How do new laws come into being? Could there be laws that are unpopular or controversial? What should we as citizens do under such circumstances? Do Laws Apply to All? Should economically and politically powerful be exempted from the laws?

Members of the Constituent Assembly were agreed there should be no arbitrary exercise of power in independent India. They, therefore, instituted several provisions in the Constitution that would establish the rule of law. The most important of these was that all persons in independent India are equal before the law.

The law cannot discriminate between persons on the basis of their religion, caste or gender. What the rule of law means is that all laws apply equally to all citizens of the country and no one can be above the law. Neither a government official, nor a wealthy person nor even the President of the country is above the law. Any crime or violation of law has a specific punishment as well as a process through which the guilt of the person has to be established. But was it always like this?

In ancient India, there were innumerable and often overlapping local laws. Different communities enjoyed different degrees of autonomy in administering these laws among their own. In some cases, the punishment that two persons received for the same crime varied depending on their caste backgrounds, with lower castes being more harshly penalised. This slowly began to change as this system of law began to further evolve during the colonial period.

*Another example of British arbitrariness was the Rowlatt Act which allowed the British government to imprison people without due trial. Indian nationalists including Mahatma Gandhi were vehement in their opposition to the Rowlatt bills. Despite the large number of protests, the Rowlatt Act came into effect on 10 March 1919. In Punjab, protests against this Act continued quite actively and on April 10 two leaders of the movement, Dr Satyapal and Dr Saifuddin Kitchlew were arrested. To protest these arrests, a public meeting was held on 13 April at Jallianwala Bagh in Amritsar. General Dyer entered the park with his troops. They closed the only exit and without giving any warning General Dyer ordered the troops to fire. Several hundreds of people died in this gunfire and many more were wounded including women and children. This painting shows troops firing on the people during the Jallianwala Bagh massacre.*

It is often believed that it was the British colonialists who introduced the rule of law in India. Historians have disputed this claim on several grounds, two of which include: first that colonial law was arbitrary, and second that the Indian nationalists played a prominent role in the development of the legal sphere in British India. One example of the arbitrariness that continued to exist as part of British law is the **Sedition** Act of 1870. The idea of sedition was very broadly understood within this Act. Any person protesting or criticising the British government could be arrested without due trial.

Indian nationalists began protesting and criticising this arbitrary use of authority by the British. They also began fighting for greater equality and wanted to change the idea of law from a set of rules that they were forced to obey, to law as including ideas of justice. By the end of the nineteenth century, the Indian legal profession also began emerging and demanded respect in colonial courts. They began to use law to defend the legal rights of Indians. Indian judges also began to play a greater role in making decisions. Therefore, there were several ways in which Indians played a major role in the **evolution** of the rule of law during the colonial period.

With the adoption of the Constitution, this document served as the foundation on which our representatives began making laws for the country. Every year our representatives pass several new laws as well as revise existing ones.

#### How Do New Laws Come About?

The Parliament has an important role in making laws. There are many ways through which this takes place and it is often different groups in society that raise the need for a particular law. An important role of

Parliament is to be sensitive to the problems faced by people.

From establishing the need for a new law to its being passed, at every stage of the process the voice of the citizen is a crucial element. This voice can be heard through TV reports, newspaper editorials, radio broadcasts, local meetings - all of which help in making the work that Parliament does more accessible and transparent to the people.

*What do you understand by 'domestic violence'? List the two rights that the new law helped achieve for women who are survivors of violence.*

Domestic violence refers to the injury or harm or threat of injury or harm caused by an adult male, usually the husband, against his wife. Injury may be caused by physically beating up the woman or by emotionally abusing her. Abuse of the woman can also include verbal, sexual and economic abuse. The Protection of Women from Domestic Violence Act 2005 extends the understanding of the term 'domestic' to include all women who 'live or have lived together in a shared household' with the male member who is perpetrating the violence. The Protection of Women from Domestic Violence Act came into effect in 2006.

### Unpopular and Controversial Laws

Let us now look at the situation where the Parliament passes laws that turn out to be very unpopular. Sometimes a law can be constitutionally valid and hence legal, but it can continue to be unpopular and unacceptable to people because they feel that the intention behind it is unfair and harmful. Hence, people might **criticise** this law, hold public meetings, write about it in newspapers, report to TV news channels etc. In a democracy like ours, citizens can express their unwillingness to accept **repressive** laws framed by the Parliament. When a large number of people begin to feel that a wrong law has been passed, then there is pressure on the Parliament to change this.

For example, various municipal laws on the use of space within municipal limits often make hawking and street vending illegal. No one will dispute the necessity for some rules to keep the public space open so that people can walk on the pavements easily. However, one also cannot deny that hawkers and vendors provide essential services cheaply and efficiently to the millions living in a large city. This is their means of livelihood. Hence, if the law favours one group and disregards the other it will be controversial and lead to conflict. People who think that the law is not fair can approach the court to decide on the issue. The court has the power to modify or cancel laws if it finds that they don't adhere to the Constitution. As you read in the earlier section on the rule of law, Indian nationalists protested and criticised arbitrary and repressive laws being enforced by the British. History provides us with several examples of people and communities who have struggled to end unjust laws. In your Class VII book, you read of how Rosa Parks, an African-American woman, refused to give up her seat on a bus to a white man on 1 December 1955. She was protesting the law on segregation that divided up all public spaces, including the streets, between the whites and the African-Americans. Her refusal was a key event that marked the start of the Civil Rights Movement, which led to the Civil Rights Act in 1964, which prohibited discrimination on the basis of race, religion or national origin in the U.S.A.

We need to remember that our role as citizens does not end with electing our representatives. Rather, it is then that we begin to use newspapers and the media to

carefully chart the work that is being done by our MPs and criticise their actions when we feel it is required. Thus, what we should bear in mind is that it is the extent, involvement and enthusiasm of the people that helps Parliament perform its representative functions properly.

**Important Terms Evolution:** In context to this chapter, evolution refers to the way in which protecting the women from domestic violence developed from an urgently-felt requirement of a new law which can be enforced throughout the country. **Criticise:** To find fault with or disapprove of an individual or a thing. In context of this chapter, it refers to the citizens finding fault with the government's functioning. **Sedition:** This refers to anything that the government may consider as stirring up resistance or revolt against it. In such cases, the government doesn't require absolute evidence to arrest the responsible individuals. Under the Sedition Act of 1970, the Britishers had an extremely broad interpretation of what constituted sedition, and what this meant was that they could arrest and detain any individual they wanted under this Act. **Repressive:** In context to the chapter, this refers to the laws that use unethical ways to control persons and prevent them from using their fundamental rights. **Rule of Law:** This means that all the laws of the country apply equally upon all the citizens, irrespective of any discrimination and no one can be above the law.

## Chapter 5 Judiciary

A glance at the newspaper provides you a glimpse of the range of work done by the courts in this country. But can you think of why we need these courts? As you have read in Unit 2, in India we have the rule of law. What this means is that laws apply equally to all persons and that a certain set of fixed procedures need to be followed when a law is violated. To enforce this rule of law, we have a judicial system that consists of the mechanism of courts that a citizen can approach when a law is violated. As an organ of government, the judiciary plays a crucial role in the functioning of India's democracy. It can play this role only because it is independent. What does an 'independent judiciary' mean? Is there any connection between the court in your area and the Supreme Court in New Delhi? In this chapter, you will find answers to these questions

### What is the Role of the Judiciary?

Courts take decisions on a very large number of issues. They can decide that no teacher can beat a student, or about the sharing of river waters between states, or they can punish people for particular crimes. Broadly speaking, the work that the judiciary does can be divided into the following:

**Dispute Resolution:** The judicial system provides a mechanism for resolving disputes between citizens, between citizens and the government, between two state governments and between the centre and state governments.

**Judicial Review:** As the final interpreter of the Constitution, the judiciary also has the power to strike down particular laws passed by the Parliament if it believes that these are a **violation** of the basic structure of the Constitution. This is called judicial review.

### Upholding the Law and Enforcing Fundamental Rights

**Rights:** Every citizen of India can approach the Supreme Court or the High Court if they believe that their Fundamental Rights have been violated. In *Paschim Banga Khet Mazdoor Samity vs State of West Bengal* (1996) the Supreme Court ruled that Article 21 which provides every citizen the Fundamental Right to



Life also includes the Right to Health.

### What is an Independent Judiciary?

Imagine a situation in which a powerful politician has encroached on land belonging to your family. Within this judicial system, the politician has the power to appoint and dismiss a judge from his office. When you take this case to court, the judge is clearly partial to the politician.

The control that the politician holds over the judge does not allow for the judge to take an independent decision. This lack of independence would force the judge to make all judgments in favour of the politician. Although we often hear of rich and powerful people in India trying to influence the judicial process, the Indian Constitution protects against this kind of situation by providing for the independence of the judiciary. One aspect of this independence is the 'separation of powers'. This, as you read in Chapter 1, is a key feature of the Constitution. What this means here is that other branches of government – the legislature and the executive – cannot interfere in the work of the judiciary. The courts are not under the government and do not act on their behalf.

For the above separation to work well, it is also crucial that all judges in the High Court as well as the Supreme Court are appointed with very little interference from these other branches of government. Once appointed to this office, it is also very difficult to remove a judge. It is the independence of the judiciary that allows the courts to play a central role in ensuring that there is no misuse of power by the legislature and the executive. It also plays a crucial role in protecting the Fundamental Rights of citizens because anyone can approach the courts if they believe that their rights have been violated.

### What is the Structure of Courts in India?

There are three different levels of courts in our country. There are several courts at the lower level while there is only one at the apex level. The courts that most people interact with are what are called subordinate or district courts. These are usually at the district or Tehsil level or in towns and they hear many kinds of cases. Each state is divided into districts that are presided over by a District Judge. Each state has a High Court which is the highest court of that state. At the top is the Supreme Court that is located in New Delhi and is presided over by the Chief Justice of India. The decisions made by the Supreme Court are binding on all other courts in India. *High Courts were first established in the three Presidency cities of Calcutta, Bombay and Madras in 1862. The High Court of Delhi came up in 1966. Currently there are 24 High Courts. While many states have their own High Courts, Punjab and Haryana share a common High Court at Chandigarh, and four North Eastern states of Assam, Nagaland, Mizoram and Arunachal Pradesh have a common High Court at Guwahati. Andhra Pradesh and Telangana have a common High Court at Hyderabad. Some High Courts have benches in other parts of the state for greater accessibility.*

Are these different levels of courts connected to each other? Yes, they are. In India, we have an integrated judicial system, meaning that the decisions made by higher courts are binding on the lower courts. Another way to understand this integration is through the appellate system that exists in India. This means that a person can appeal to a higher court if they believe that the judgment passed by the lower court is not just.

*The subordinate court is more commonly known by many different names. These include the Trial Court or the Court of the District Judge, the Additional Sessions Judge, Chief Judicial Magistrate, Metropolitan Magistrate, Civil Judge. Alongside is a photograph of the District Court in Raipur, Chhattisgarh.*

### What are the Different Branches of the Legal System?

#### Criminal Law:

- (i) Deals with conduct or acts that the law defines as offences. *For example*, theft, harassing a woman to bring more dowry, murder, etc.
- (ii) It usually begins with the lodging of a First Information Report (FIR) with the police who investigate the crime, after which a case is filed in the court.
- (iii) If found guilty, the accused can be sent to jail and can also be fined.

#### Civil Law:

- (i) Deals with any harm or injury to rights of individuals. For example, disputes relating to sale of land, purchase of goods, rent matters, divorce cases, etc.
- (ii) A petition has to be filed before the relevant court by the affected party only. In a rent matter, either the landlord or tenant can file a case.
- (iii) The court gives the specific relief asked for. For instance, in a case between a landlord and a tenant, the court can order the flat to be vacated and pending rent to be paid.

### Does Everyone Have Access to the Courts?

In principle, all citizens of India can access the courts in this country. This implies that every citizen has a right to justice through the courts. As you read earlier, the courts play a very significant role in protecting our Fundamental Rights. If any citizen believes that their rights are being violated, then they can approach the court for justice to be done. While the courts are available for all, in reality access to courts has always been difficult for a vast majority of the poor in India. Legal procedures involve a lot of money and paperwork as well as take up a lot of time. For a poor person who cannot read and whose family depends on a daily wage, the idea of going to court to get justice often seems remote.

In response to this, the Supreme Court in the early 1980s devised a mechanism of Public Interest Litigation or PIL to increase access to justice. It allowed any individual or organisation to file a PIL in the High Court or the Supreme Court on behalf of those whose rights were being violated. The legal process was greatly simplified and even a letter or telegram addressed to the Supreme Court or the High Court could be treated as a PIL. In the early years, PIL was used to secure justice on a large number of issues such as rescuing bonded labourers from inhuman work conditions; and securing the release of prisoners in Bihar who had been kept in jail even after their punishment term was complete. Did you know that the mid-day meal that children now receive in government and government-aided schools is because of a PIL? See the photos on the right and read the text below to understand how this came about.

*An organisation called the People's Union of Civil Liberties or PUCCL filed a PIL in the Supreme Court. It stated that the fundamental Right to Life guaranteed in Article 21 of the Constitution included the Right to Food. The state's excuse that it did not have adequate funds was shown to be wrong because the godowns were overflowing with grains. The Supreme Court ruled that*

*the State had a duty to provide food to all. It, therefore, directed the government to provide more employment, to provide food at cheaper prices through the government ration shops, and to provide mid-day meals to children. It also appointed two Food Commissioners to report on the implementation of government schemes.*

*In Olga Tellis vs Bombay Municipal Corporation 1985 Court had tried to protect the livelihoods of slum dwellers. The judgment established the Right to Livelihood as part of the Right to Life. The following excerpts from the judgment point to the ways in which the judges linked the issue of the Right to Life to that of livelihood: The sweep of the Right to Life, conferred by Article 21 is wide and far reaching. 'Life' means something more than mere animal existence. It does not mean merely that life cannot be extinguished or taken away as, for example, by the imposition and execution of the death sentence, except according to procedure established by law. That is but one aspect of the Right to Life. An equally important facet of that right is the right to livelihood because no person can live without the means of living, that is, the means of livelihood.*

For the common person, access to courts is access to justice. The courts exercise a crucial role in interpreting the Fundamental Rights of citizens and as you saw in the above cases.

Another issue that affects the common person's access to justice is the inordinately long number of years that courts take to hear a case. The phrase 'justice delayed is justice denied' is often used to characterise this extended time period that courts take. However, in spite of this there is no denying that the judiciary has played a crucial role in democratic India, serving as a check on the powers of the executive and the legislature as well as in protecting the Fundamental Rights of citizens. The members of the Constituent Assembly had quite correctly envisioned a system of courts with an independent judiciary as a key feature of our democracy.

**Important Terms Violation:** This refers to breaking a law or encroachment of an individual's Fundamental Rights. **Acquit:** This refers to the court declaring that an individual is not guilty for the crime which he was tried for by the court. **Judicial system:** This is the mechanism of courts which a citizen may approach when a law is violated. **Judicial review:** The judiciary has the power to modify or cancel such laws passed by the Parliament, which do not adhere to the Constitution. This is called Judicial Review. **To appeal:** In context of this chapter, it refers to a petition filed before a higher court to hear a case which has already been decided by a lower court. **Eviction:** In context of this chapter, it refers to the removal of individuals from homes/land which they are currently living in. **Separation of power:** It refers to division of powers between the central and state governments. **Violation:** In context of it chapter, it refers to the act of breaking a law or the breach of fundamental rights.

## Chapter 6

### Understanding Our Criminal Justice System

When we see someone violating the law, we immediately think of informing the police. You might have seen, either in real life or in the movies, police officers filing reports and arresting persons. Because of the role played by the police in arresting persons, we often get confused and think that it is the police who decide whether a person is guilty or not. This, however, is far from true. After a person is arrested, it is a court of law that decides whether the **accused** person is guilty

or not. According to the Constitution, every individual charged of a crime has to be given a fair trial.

Do you know what it means to get a fair trial? Have you heard of an FIR? Or, do you know who a public prosecutor is? Most cases go through a process and understanding these processes as well as the role that different persons should play within the criminal justice system is crucial, so that if ever the occasion should arise, you are aware of the processes that should be followed.

### What is the Role of the Police in Investigating a Crime?

One important function of the police is to investigate any complaint about the commission of a crime. An investigation includes recording statements of **witnesses** and collecting different kinds of evidence. On the basis of the investigation, the police are required to form an opinion. If the police think that the evidence points to the guilt of the accused person, then they file a chargesheet in the court. As stated at the beginning of this chapter, it is not the job of the police to decide whether a person is guilty or innocent, that is for the judge to decide.

You read in Unit 2 about the rule of law, which means that everyone is subject to the law of the land. This includes the police. Therefore, police investigations always have to be conducted in accordance with law and with full respect for human rights. The Supreme Court has laid down guidelines that the police must follow at the time of arrest, **detention** and interrogation. The police are not allowed to torture or beat or shoot anyone during investigation. They cannot inflict any form of punishment on a person even for petty **offences**.

It is with the registration of an FIR that the police can begin their investigations into a crime. The law states that it is compulsory for an officer in charge of a police station to register an FIR whenever a person gives information about a **cognizable** offence. This information can be given to the police either orally or in writing. The FIR usually mentions the date, time and place of the offence, details the basic facts of the offence, including a description of the events. If known, the identity of the accused persons and witnesses is also mentioned. The FIR also states the name and address of the complainant. There is a prescribed form in which the police registers an FIR and it is signed by the complainant. The complainant also has a legal right to get a free copy of the FIR from the police. Article 22 of the Constitution and criminal law guarantee to every arrested person the following Fundamental Rights:

- The Right to be informed at the time of arrest of the offence for which the person is being arrested.
  - The Right to be presented before a magistrate within 24 hours of arrest.
  - The Right not to be ill treated or tortured during arrest or in custody.
  - Confessions made in police custody cannot be used as evidence against the accused.
  - A boy under 15 years of age and women cannot be called to the police station only for questioning.
- The Supreme Court of India has laid down specific requirements and procedures that the police and other agencies have to follow for the arrest, detention and interrogation of any person. These are known as the D.K. Basu Guidelines and some of these include:*
- *The police officials who carry out the arrest or interrogation should wear clear, accurate and visible*

identification and name tags with their designations;

- A memo of arrest should be prepared at the time of arrest and should include the time and date of arrest. It should also be attested by at least one witness who could include a family member of the person arrested. The arrest memo should be counter-signed by the person arrested.

- The person arrested, detained or being interrogated has a right to inform a relative, friend or well-wisher.
- When a friend or relative lives outside the district, the time, place of arrest and venue of custody must be notified by police within 8 to 12 hours after arrest.

### What is the Role of the Public Prosecutor?

A criminal offence is regarded as a public wrong. What is meant by this is that it is considered to have been committed not only against the affected victims but against society as a whole. The case normally named as *State vs Party Name*. In court, it is the Public Prosecutor who represents the interests of the State. The role of the Prosecutor begins once the police has conducted the investigation and filed the chargesheet in the court. He/she has no role to play in the investigation. The Prosecutor must conduct the prosecution on behalf of the State. As an officer of the court, it is his/her duty to act impartially and present the full and material facts, witnesses and evidence before the court to enable the court to decide the case.

### What is the Role of the Judge?

(i) The judge is like an umpire in a game and conducts the trial impartially and in an open court. (ii) The judge hears all the witnesses and any other evidence presented by the prosecution and the defence. (iii) The judge decides whether the accused person is guilty or innocent on the basis of the evidence presented and in accordance with the law. (iv) If the accused is convicted, then the judge pronounces the sentence. (v) He may send the person to jail or impose a fine or both, depending on what the law prescribes.

### What is a Fair Trial?

(i) A fair trial is a trial which is held in an open court, in public view. (ii) Any relative can attend the court. The trial is held in the presence of the accused. (iii) The accused is defended by a lawyer. The advocate of the accused is given an opportunity to present witnesses in the accused defence. (iv) Although the police files the case, the judge should assume the accused to be innocent. (v) The judge should decide the matter only on the basis of evidence before the court. (vi) The judge should be impartial. They all should ensure that all the citizens irrespective of their class, caste, gender, religious and ideological background get a fair trial when being accused.

**Important Terms**

**Offence:** Such act which the law defines as a crime. **Witness:** This refers to an individual who is called upon in the court to give a first-hand account of what he has seen, heard or knows. **Accused:** A person who is tried in court for a crime. **Detention:** This refers to a situation when the police forcibly retains someone in custody. **Cross-examine:** In context of this chapter, this refers to the questioning of a witness who has already been examined by the opposing side in order to determine the veracity of his statement. **Evidence:** This refers to the facts/signs that make one believe that something is true. **Impartial:** The act of being fair and judicial and not favouring someone in a biased way. **Cognizable:** In context of this chapter, this refers to an offense for which the police may arrest an individual without the permission of the court. **Memo:** This refers to an official note.

## Chapter 7 Understanding Marginalisation

Marginalisation means when groups of people or communities are being excluded from the majority because of their language, customs or religion.

- The people who lived in close association with forests are known as Adivasi. Around 8% of India's population is Adivasi.

### What Does it Mean to be Socially Marginalised?

To be marginalised is to be forced to occupy the sides or fringes and thus not be at the centre of things. Groups of people or communities may have the experience of being excluded. Their marginalisation can be because they speak a different language, follow different customs or belong to a different religious group from the majority community. They may also feel marginalised because they are poor, considered to be of 'low' social status and viewed as being less human than others. Sometimes, marginalised groups are viewed with hostility and fear. This sense of difference and exclusion leads to communities not having access to resources and opportunities and in their inability to assert their rights. They experience a sense of disadvantage and powerlessness vis-a-vis more powerful and dominant sections of society who own land, are wealthy, better educated and politically powerful. Thus, marginalisation is seldom experienced in one sphere. Economic, social, cultural and political factors work together to make certain groups in society feel marginalised.

### Who are Adivasis?

Adivasis – the term literally means 'original inhabitants' – are communities who lived, and often continue to live, in close association with forests. Around 8 per cent of India's population is Adivasi and many of India's most important mining and industrial centres are located in Adivasi areas – Jamshedpur, Rourkela, Bokaro and Bhilai among others. Adivasis are particularly numerous in states like Chhattisgarh, Jharkhand, Madhya Pradesh, Orissa, Gujarat, Maharashtra, Rajasthan, Andhra Pradesh, West Bengal and in the north-eastern states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura. Adivasi societies are also most distinctive because there is often very little **hierarchy** among them. This makes them radically different from communities organised around principles of jati-varna (caste) or those that were ruled by kings. Tribals are also referred to as Adivasis. Scheduled Tribes is the term used for Adivasis used by the Indian government in various official documents. There is an official list of tribes.

Adivasis practise a range of tribal religions that are different from Islam, Hinduism and Christianity. These often involve the worship of ancestors, village and nature spirits, the last associated with and residing in various sites in the landscape – 'mountain-spirits', 'river-spirits', 'animal-spirits', etc. Additionally, Adivasis have always been influenced by different surrounding religions like Shakta, Buddhist, Vaishnav, Bhakti and Christianity. During the nineteenth century, substantial numbers of Adivasis converted to Christianity, which has emerged as a very important religion in modern Adivasi history.

Adivasis have their own languages (most of them radically different from and possibly as old as Sanskrit), which have often deeply influenced the formation of 'mainstream' Indian languages, like Bengali. Santhali has the largest number of speakers and has a significant



body of publications including magazines on the internet or in e-zines.

### Adivasis and Stereotyping

In India, we usually 'showcase' Adivasi communities in particular ways. Thus, during school functions or other official events or in books and movies, Adivasis are invariably portrayed in very stereotypical ways – in colourful costumes, headgear and through their dancing. Besides this, we seem to know very little about the realities of their lives. This often wrongly leads to people believing that they are exotic, primitive and backward. Often Adivasis are blamed for their lack of advancement as they are believed to be resistant to change or new ideas. Stereotyping particular communities can lead to people discriminating against such groups.

### Adivasis and Development

Forests covered the major part of our country till the nineteenth century and the Adivasis had a deep knowledge of, access to, as well as control over most of these vast tracts at least till the middle of the nineteenth century. This meant that they were not ruled by large states and empires. Instead, often empires heavily depended on Adivasis for the crucial access to forest resources.

This is radically contrary to our image of Adivasis today as somewhat marginal and powerless communities. In the pre-colonial world, they were traditionally ranged hunter-gatherers and nomads and lived by shifting agriculture and also cultivating in one place. Although these remain, for the past 200 years Adivasis have been increasingly forced – through economic changes, forest policies and political force applied by the State and private industry – to migrate to lives as workers in plantations, at construction sites, in industries and as domestic workers. For the first time in history, they do not control or have much direct access to the forest territories.

From the 1830s onwards, Adivasis from Jharkhand and adjoining areas moved in very large numbers to various plantations in India and the world – Mauritius, the Caribbean and even Australia. India's tea industry became possible with their labour in Assam. Today, there are 70 lakh Adivasis in Assam alone. The story of this migration is full of extreme hardship, torture, heartbreak and death.

Forest lands have been cleared for timber and to get land for agriculture and industry. Adivasis have also lived in areas that are rich in minerals and other natural resources. These are taken over for mining and other large industrial projects. Powerful forces have often colluded to take over tribal land. Much of the time, the land is taken away forcefully and procedures are not followed. According to official figures, more than 50 per cent of persons **displaced** due to mines and mining projects are tribals. Another recent survey report by organisations working among Adivasis shows that 79 per cent of the persons displaced from the states of Andhra Pradesh, Chhattisgarh, Orissa and Jharkhand are tribals. Huge tracts of their lands have also gone under the waters of hundreds of dams that have been built in independent India. In the North east, their lands remain highly **militarised** and war-torn. India has 54 national parks and 372 wildlife sanctuaries covering 1,09,652 sq km. These are areas where tribals originally lived but were evicted from. When they continue to stay in these forests, they are termed encroachers.

*Niyamgiri Hill located in Kalahandi district of Orissa.*

*This area is inhabited by Dongarria Konds, an Adivasi community. Niyamgiri is the sacred mountain of this community. A major aluminium company is planning to set up a mine and a refinery here which will displace this Adivasi community. They have strongly resisted this proposed development and have been joined by environmentalists as well. A case against the company is also pending in the Supreme Court.*

Losing their lands and access to the forest means that tribals lose their main sources of livelihood and food. Having gradually lost access to their traditional homelands, many Adivasis have migrated to cities in search of work where they are employed for very low wages in local industries or at building or construction sites. They, thus, get caught in a cycle of poverty and deprivation. 45 per cent of tribal groups in rural areas and 35 per cent in urban areas live below the poverty line. This leads to deprivation in other areas. Many tribal children are **malnourished**. Literacy rates among tribals are also very low.

Adivasis use around 10,000 plant species – approximately 8,000 species are used for medicinal purposes; 325 are used as pesticides; 425 as gums, resins and dyes; 550 as fibres; 3,500 are edible. This entire knowledge system gets wiped out when Adivasis lose their rights over forest lands.

When Adivasis are displaced from their lands, they lose much more than a source of income. They lose their traditions and customs – a way of living and being.

*"They took our farming land. They left some houses.*

*As you have read, there exists an interconnectedness between the economic and social dimensions of tribal life. Destruction in one sphere naturally impacts the other. Often this process of dispossession and displacement can be painful and violent*

*In your opinion, why is it important that Adivasis should have a say in how their forests and forest lands are used?*

### Minorities and Marginalisation

Constitution provides safeguards to religious and linguistic minorities as part of our Fundamental Rights.

Why do you think these minority groups have been provided these safeguards? The term minority is most commonly used to refer to communities that are numerically small in relation to the rest of the population. However, it is a concept that goes well beyond numbers. It encompasses issues of power, access to resources and has social and cultural dimensions. Constitution recognised that the culture of the majority influences the way in which society and government might express themselves. In such cases, size can be a disadvantage and lead to the marginalisation of the relatively smaller communities. Thus, safeguards are needed to protect minority communities against the possibility of being culturally dominated by the majority. They also protect them against any discrimination and disadvantage that they may face. Given certain conditions, communities that are small in number relative to the rest of society may feel insecure about their lives, assets and well-being.

This sense of insecurity may get accentuated if the relations between the minority and majority communities are fraught. The Constitution provides these safeguards because it is committed to protecting India's cultural diversity and promoting equality as well as justice. The judiciary plays a crucial role in upholding the law and enforcing Fundamental Rights. Every citizen of India can approach the courts if they believe that their Fundamental Rights have been violated. Now

let us understand marginalisation in the context of the Muslim community.

### Muslims and Marginalisation

According to 2001 census, Muslims are 13.4 per cent of India's population and are considered to be a marginalised community in India today because in comparison to other communities, they have over the years been deprived of the benefits of socio-economic development. The data in the three tables below, derived from different sources, indicate the situation of the Muslim community with regard to basic amenities, literacy and public employment. Read the tables below. What do you think these tables tell us about the socio-economic status of the Muslim community? Why do we need safeguards for minorities? Recognising that Muslims in India were lagging behind in terms of various development indicators, the government set up a high-level committee in 2005. Chaired by Justice Rajindar Sachar, the committee examined the social, economic and educational status of the Muslim community in India. The report discusses in detail the marginalisation of this community. It suggests that on a range of social, economic and educational indicators the situation of the Muslim community is comparable to that of other marginalised communities like Scheduled Castes and Scheduled Tribes. For example, according to the Report the average years of schooling for Muslim children between the ages of 7-16 is much lower than that of other socio-religious communities.

*Do you think special measures are required to address this situation?*

Economic and social marginalisation experienced by Muslims has other dimensions as well. Like other minorities, Muslim customs and practices are sometimes quite distinct from what is seen as the mainstream. Some – not all – Muslims may wear a burqa, sport a long beard, wear a fez, and these become ways to identify all Muslims. Because of this, they tend to be identified differently and some people think they are not like the 'rest of us'. Often this becomes an excuse to treat them unfairly, and discriminate against them. This social marginalisation of Muslims in some instances has led to them migrating from places where they have lived, often leading to the **ghettoisation** of the community. Sometimes, this prejudice leads to hatred and violence.

The experiences of all these groups point to the fact that marginalisation is a complex phenomenon requiring a variety of strategies, measures and safeguards to redress this situation. All of us have a stake in protecting the rights defined in the Constitution and the laws and policies framed to realise these rights. Without these, we will never be able to protect the diversity that makes our country unique nor realise the State's commitment to promote equality for all.

### Conclusion

In this chapter, we have tried to understand what it means to be a marginalised community. We have tried to look at this through the experiences of different marginalised communities. There are different reasons for each of these communities being marginalised. Each experiences marginalisation in different ways. We have also seen that marginalisation is linked to experiencing disadvantage, prejudice and powerlessness. Marginalisation results in having a low social status and not having equal access to education and other resources. Marginalised communities want to maintain

their cultural distinctiveness while having access to rights, development and other opportunities. In the next chapter, we will read about how different groups have confronted marginalisation.

**Important Terms** **Ghettoisation:** This refers to the process in which a region or an area is populated largely by persons of a particular community. **Adivasi:** This refers to original inhabitants. **Hierarchy:** A graded system or arrangement of people or things. Generally, people present at the bottom of the hierarchy have the least power. *For example,* the caste system is a hierarchal system and the Dalits are considered to be at the lowest end. **Militarised:** An area where there is considerable number of armed forces. **Malnourished:** A person who is deprived of adequate nutrition or food. **Mainstream:** Persons or communities considered to be in the centre of a society. **Marginalisation:** This term refers to the condition in which a person or group of persons is deprived of several privileges or is/are treated as different from others.

## Chapter 8 Confronting Marginalisation

In this chapter, we will read about some of the ways in which groups and individuals challenge existing inequalities. Adivasis, Dalits, Muslims, women and other marginal groups argue that simply by being citizens of a democratic country, they possess equal rights that must be respected. Many among them look up to the Constitution to address their concerns. In this chapter, we will see why the Constitution of India is something that marginalised groups invoke in the course of their struggles. As part of this, we will look at how rights are translated into laws to protect groups from continued exploitation and we will also look at the government's efforts to formulate policies to promote the access of these groups to development.

### Invoking Fundamental Rights

The Constitution, as you have learnt in the first chapter of this book, lays down the principles that make our society and polity democratic. They are defined in and through the list of Fundamental Rights that are an important part of the Constitution. These rights are available to all Indians equally. As far as the marginalised are concerned, they have drawn on these rights in two ways: first, by insisting on their Fundamental Rights, they have forced the government to recognise the injustice done to them. Second, they have insisted that the government enforce these laws. In some instances, the struggles of the marginalised have influenced the government to frame new laws, in keeping with the spirit of the Fundamental Rights.

Article 17 of the Constitution states that untouchability has been abolished – what this means is that no one can henceforth prevent Dalits from educating themselves, entering temples, using public facilities etc. It also means that it is wrong to practise untouchability and that this practice will not be tolerated by a democratic government. In fact, untouchability is a punishable crime now.

There are other sections in the Constitution that help to strengthen the argument against untouchability – for example, Article 15 of the Constitution notes that no citizen of India shall be discriminated against on the basis of religion, race, caste, sex or place of birth. The idea of purity is illogical that since every human is born in the same manner, there is nothing that makes one body less or more pure than the other. Pollution, a key tool of the caste system to separate or deny people access to spaces, work, knowledge and dignity, occurs not through the nature of work done, but 'from within' –

from your thoughts, values and beliefs. Therefore, Dalits can 'invoke' or 'draw on' a Fundamental Right (or Rights) in situations where they feel that they have been treated badly by some individual or community, or even by the government. They have drawn the attention of the government of India to the Constitution, demanding that the government abide by it and do justice to them. Likewise, other minority groups have drawn on the Fundamental Rights section of our Constitution. They have particularly drawn upon the right to freedom of religion and cultural and educational rights. In the case of cultural and educational rights, distinct cultural and religious groups like the Muslims and Parsis have the right to be the guardians of the content of their culture, as well as the right to make decisions on how best this content is to be preserved. Thus, by granting different forms of cultural rights, the Constitution tries to ensure cultural justice to such groups. The Constitution does this so that the culture of these groups is not dominated nor wiped out by the culture of the majority community.

### Laws for the Marginalised

As you have read, the government makes laws to protect its citizens. Yet, this is not the only way in which it takes action. There are specific laws and policies for the marginalised in our country. There are policies or schemes that emerge through other means like setting up a committee or by undertaking a survey etc. The government then makes an effort to promote such policies in order to give opportunities to specific groups.

### Promoting Social Justice

As part of their effort to implement the Constitution, both state and central governments create specific schemes for implementation in tribal areas or in areas that have a high Dalit population. For example, the government provides for free or subsidised hostels for students of Dalit and Adivasi communities so that they can avail of education facilities that may not be available in their localities.

In addition to providing certain facilities, the government also operates through laws to ensure that concrete steps are taken to end inequity in the system. One such law/**policy** is the reservation policy that today is both significant and highly contentious. The laws which reserve seats in education and government employment for Dalits and Adivasis are based on an important argument- that in a society like ours, where for centuries sections of the population have been denied opportunities to learn and to work in order to develop new skills or vocations, a democratic government needs to step in and assist these sections.

### Protecting the Rights of Dalits and Adivasis The Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Act, 1989

This Act was framed in 1989 in response to demands made by Dalits and others that the government must take seriously the ill treatment and humiliation Dalits and tribal groups face in an everyday sense. While such treatment had persisted for a long time, it had acquired a violent character in the late 1970s and 1980s. During this period, in parts of southern India, a number of **assertive** Dalit groups came into being and asserted their rights – they refused to perform their so-called caste duties and insisted on being treated equally; This resulted in the more powerful castes unleashing violence against them. In order to indicate to the government that untouchability was still being practised and in the most hideous manner, Dalit groups demanded new laws that

would list the various sorts of violence against dalits and prescribe stringent punishment for those who indulge in them.

Likewise, throughout the 1970s and 1980s Adivasi people successfully organised themselves and demanded equal rights and for their land and resources to be returned to them. They too had to face the anger of powerful social groups and were subject to a great deal of violence.

The Act distinguishes several levels of crimes. Firstly, it lists *modes of humiliation* that are both physically horrific and **morally reprehensible** and seeks to punish those who (i) force a member of a Scheduled Caste or a Scheduled Tribe to drink or eat any inedible or obnoxious substance; ... (iii) forcibly removes clothes from the person of a member of a Scheduled Caste or a Scheduled Tribe or parades him or her naked or with painted face or body or commits any similar act which is derogatory to human dignity...

Secondly, it *lists actions that dispossess Dalits and Adivasis* of their meagre resources or which force them into performing slave labour. Thus, the Act sets out to punish anyone who (iv) wrongfully occupies or cultivates any land owned by, or allotted to, ... a member of a Scheduled Caste or a Scheduled Tribe or gets the land allotted to him transferred;

At another level, the Act recognizes that *crimes against Dalit and tribal women* are of a specific kind and, therefore, seeks to penalise anyone who (xi) assaults or uses force on any woman belonging to a Scheduled Caste or a Scheduled Tribe with intent to dishonour her

...

### The Scourge of Manual Scavenging

Manual scavenging refers to the practice of removing human and animal waste/excreta using brooms, tin plates and baskets from dry latrines and carrying it on the head to disposal grounds some distance away. A manual scavenger is the person who does the job of carrying this filth. This job is mainly done by Dalit women and young girls. Manual scavengers are exposed to subhuman conditions of work and face serious health hazards. They are constantly exposed to infections that affect their eyes, skin, respiratory and gastro-intestinal systems. They get very low wages for the work they perform.

As you have read earlier in this book, the practice of untouchability has been abolished by the Indian Constitution. However, manual scavengers in different parts of the country, the Bhangis in Gujarat, Pakhis in Andhra Pradesh and the Sikkaliars in Tamil Nadu, continue to be considered untouchable. They often live in separate settlements on the outskirts of the village and are denied access to the temple, public water facilities etc.

In 1993, the government passed the Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act. This law prohibits the employment of manual scavengers as well as the construction of dry latrines. In 2003, the Safai Karamchari Andolan and 13 other organisations and individuals, including seven scavengers, filed a PIL in the Supreme Court. The petitioners complained that manual scavenging still existed and it continued in government undertakings like the railways. The petitioners sought enforcement of their Fundamental Rights. The court observed that the number of manual scavengers in India had increased since the 1993 law. It directed every department/ministry of the union government and state governments to verify the facts within six months. If



manual scavenging was found to exist, then the government department has to actively take up a time-bound programme for their liberation and rehabilitation. *The central government passed the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006. The introduction to the final Act states that this Act is meant to undo the historical injustices meted out to forest dwelling populations in not recognising their rights to land and resources. This Act recognises their right to homestead, cultivable and grazing land and to non-timber forest produce. The Act also points out that the rights of forest dwellers includes conservation of forests and bio-diversity.*

### Adivasi Demands and the 1989 Act

The 1989 Act is important for another reason – Adivasi activists refer to it to defend their right to occupy land that was traditionally theirs. As you read in the previous chapter Adivasis are often unwilling to move from their land and are forcibly displaced. Activists have asked that those who have forcibly encroached upon tribal lands should be punished under this law. They have also pointed to the fact that this Act merely confirms what has already been promised to tribal people in the Constitution – that land belonging to tribal people cannot be sold to or bought by non-tribal people. In cases where this has happened, the Constitution guarantees the right of tribal people to re-possess their land.

C.K. Janu, an Adivasi activist, has also pointed out that one of the violators of Constitutional rights guaranteed to tribal people are governments in the various states of India – for it is they who allow non-tribal encroachers in the form of timber merchants, paper mills etc, to exploit tribal land, and to forcibly evict tribal people from their traditional forests in the process of declaring forests as reserved or as sanctuaries. She has also noted that in cases where tribals have already been evicted and cannot go back to their lands, they must be compensated. That is, the government must draw up plans and policies for them to live and work elsewhere. After all, governments spend large sums of money on building industrial or other projects on lands taken from tribals – so why should they be reluctant to spend even very modest amounts on rehabilitating the displaced?

### Conclusion

As we can see, the existence of a right or a law or even a policy on paper does not mean that it exists in reality. People have had to constantly work on or make efforts to translate these into principles that guide the actions of their fellow citizens or even their leaders. The desire for equality, dignity and respect is not new. It has existed in different forms throughout our history as you have seen in this chapter. Similarly, even in a democratic society, similar processes of struggle, writing, negotiation and organising need to continue.

**Important Terms Confront:** To come face to face or challenge someone or something. **Ostracise:** To exclude or debar a person or a group. **Policy:** A course of action which provides future direction, sets goals to be achieved or lays down the principles or guidelines to be followed and acted upon. **Assertive:** A person or a group which expresses views in a strong way. **Dalit:** This refers to socially and economically oppressed group. **Morally reprehensible:** Such act which violates all those norms of dignity and decency which a society believes in.

## Chapter 9 Public Facilities

Government plays an important role in providing public facilities to everyone. It should provide safe drinking water to the people and also take care of sanitation facilities.

### Water as Part of the Fundamental Right to Life

Water is essential for life and for good health. Not only is it necessary for us to be able to meet our daily needs but safe drinking water can prevent many water-related diseases. India has one of the largest number of cases of diseases such as diarrhoea, dysentery, cholera. The Constitution of India recognises the right to water as being a part of the Right to Life under Article 21. This means that it is the right of every person, whether rich or poor, to have sufficient amounts of water to fulfil his/her daily needs at a price that he/she can afford. In other words, there should be **universal access** to water. There have been several court cases in which both the High Courts and the Supreme Court have held that the right to safe drinking water is a Fundamental Right.

### Public Facilities

Like water, there are other essential facilities that need to be provided for everyone. Last year you read about two other such facilities: healthcare and **sanitation**. Similarly, there are things like electricity, public transport, schools and colleges that are also necessary. These are known as public facilities.

The important characteristic of a public facility is that once it is provided, its benefits can be shared by many people. For instance, a school in the village will enable many children to get educated. Similarly, the supply of electricity to an area can be useful for many people: farmers can run pumpsets to irrigate their fields, people can open small workshops that run on electricity, students will find it easier to study and most people in the village will benefit in some way or the other. *The Indian Constitution guarantees the Right to Education for all children between the ages of 6-14 years. Equity in the schooling facilities available to all children is an important aspect of this Right. However, activists and scholars working on education have documented the fact that schooling in India continues to be highly unequal.*

### The Government's Role

Given that public facilities are so important, someone must carry the responsibility of providing these to the people. This 'someone' is the government. One of the most important functions of the government is to ensure that these public facilities are made available to everyone. Let us try and understand why the government (and only the government) must bear this responsibility.

But, for other public facilities such as schools and hospitals, private companies may well be interested. In such cases, private companies provide public facilities but at a price that only some people can afford. Hence, this facility is not available to all at an affordable rate. If we go by the rule that people will get as much as they can pay for then many people who cannot afford to pay for such facilities will be deprived of the opportunity to live a decent life.

Clearly, this is not a desirable option. Public facilities relate to people's **basic needs**. Any modern society requires that these facilities are provided so that people's basic needs are met. The Right to Life that the Constitution guarantees is for all persons living in this

country. The responsibility to provide public facilities, therefore, must be that of the government.

### Where does the government get money for public facilities?

The main source of revenue for the government is the taxes collected from the people, and the government is empowered to collect these taxes and use them for such programmes. For instance, to supply water, the government has to incur costs in pumping water, carrying it over long distances, laying down pipes for distribution, treating the water for impurities, and finally, collecting and treating waste water. It meets these expenses partly from the various taxes that it collects and partly by charging a price for water. This price is set so that most people can afford a certain minimum amount of water for daily use.

### Water Supply: Is it Available to All?

While there is no doubt that public facilities should be made available to all, in reality we see that there is a great shortage of such facilities. The burden of shortfalls in water supply falls mostly on the poor. The middle class, when faced with water shortages, are able to cope through a variety of private means such as digging borewells, buying water from tankers and using bottled water for drinking.

*In rural areas, water is needed both for human use and for use by the cattle. The sources of water are wells, handpumps, ponds and sometimes overhead tanks. Much of these are privately owned. Compared to the urban areas, there is an even greater shortage of public water supply in rural areas.*

Apart from the availability of water, access to 'safe' drinking water is also available to some and this depends on what one can afford. Once again, the wealthy have more choices, thanks to the booming market in bottled water and water purifiers. People who can afford it have safe drinking water, whereas the poor are again left out. In reality, therefore, it seems that it is only people with money who have the right to water – a far cry from the goal of universal access to 'sufficient and safe' water.

### Taking water from farmers

The shortage of water has opened up opportunities for private companies in a big way. Many private companies are providing water to cities by buying it from places around the city. Every month the water dealers pay farmers an advance for the rights to exploit water sources on their land. This is water taken away not just from agriculture but also from the drinking water supplies of the villagers. Ground water levels have dropped drastically in all these towns and villages as a result.

### In Search of Alternatives

The shortage in municipal water is increasingly being filled by an expansion of private companies who are selling water for profit. Also common are the great inequalities in water use. The supply of water per person in an urban area in India should be about 135 litres per day (about seven buckets) – a standard set by the Urban Water Commission. Whereas people in slums have to make do with less than 20 litres a day per person (one bucket), people living in luxury hotels may consume as much as 1,600 litres (80 buckets) of water per day.

A shortage of municipal water is often taken as a sign of failure of the government. Some people argue that since the government is unable to supply the amount of water that is needed and many of the municipal water departments are running at a loss, we should allow

private companies to take over the task of water supply. According to them, private companies can perform better.

### Extending Sanitation Facilities

Besides safe drinking water, sanitation is a must in prevention of water-borne diseases. However, the sanitation coverage in India is even lower than that of water. Official figures for 2001 show that 68 percent of the households in India have access to drinking water and about 36 percent have access to sanitation (toilet facilities within the premises of residence). Once again, it is the poor both in the rural and urban areas who lack access to sanitation.

Sulabh, a non-government organisation, has been working for three decades to address the problems of sanitation facing low-caste, low-income people in India. It has constructed more than 7,500 public toilet blocks and 1.2 million private toilets, giving access to sanitation to 10 million people. The majority of the users of Sulabh facilities are from the poor working class.

Sulabh enters into contracts with municipalities or other local authorities to construct toilet blocks with government funds. Local authorities provide land and funds for setting up the services, whereas maintenance costs are sometimes financed through user charges (for example, Re 1 is charged for use of the latrines in the cities).

### Conclusion

Public facilities relate to our basic needs and the Indian Constitution recognises the right to water, health, education etc as being a part of the Right to Life. Thus one of the major roles of the government is to ensure adequate public facilities for everyone. But, progress on this front has been far from satisfactory. There is a shortage in supply and there are inequalities in distribution. Compared to the metros and large cities, towns and villages are under-provided. Compared to wealthy localities, the poorer localities are under-served. Handing over these facilities to private companies may not be the answer. Any solution needs to take account of the important fact that every citizen of the country has a right to these facilities which should be provided to her/him in an equitable manner.

**Important Terms** **Basic needs:** This refers to the primary requirements such as water, food, clothing, sanitation, education and healthcare. **Universal access:** This is achieved when every individual has access to a commodity and can also afford it. **Sanitation:** Facility of safe and hygienic disposal of human faeces and urine.

## Chapter 10 Law And Social Justice

Markets everywhere tend to be exploitative of people – whether as workers, consumers or producers. To protect people from such exploitation, the government makes certain laws. These laws try to ensure that the unfair practices are kept at a minimum in the markets. Let us take a common market situation where the law is very important. This is the issue of workers' wages. Private companies, contractors, businesspersons normally want to make as much profit as they can. In the drive for profits, they might deny workers their rights and not pay them wages, for example. In the eyes of the law it is illegal or wrong to deny workers their wages. Similarly to ensure that workers are not underpaid, or are paid fairly, there is a law on minimum wages. A worker has to be paid not less than the minimum wage by the employer. The minimum wages are revised

upwards every few years.

As with the law on minimum wages, which is meant to protect workers, there are also laws that protect the interests of producers and consumers in the market. These help ensure that the relations between these three parties – the worker, consumer and producer – are governed in a manner that is not exploitative. But merely making laws is not enough. The government has to ensure that these laws are implemented. This means that the law must be enforced. Enforcement becomes even more important when the law seeks to protect the weak from the strong. For instance, to ensure that every worker gets fair wages, the government has to regularly inspect work sites and punish those who violate the law. When workers are poor or powerless, the fear of losing future earnings or facing reprisals often forces them to accept low wages. Employers know this well and use their power to pay workers less than the fair wage. In such cases, it is crucial that laws are enforced.

Through making, enforcing and upholding these laws, the government can control the activities of individuals or private companies so as to ensure social justice. Many of these laws have their basis in the Fundamental Rights guaranteed by the Indian Constitution. For instance, the Right against Exploitation says that no one can be forced to work for low wages or under bondage. Similarly, the Constitution lays down “no child below the age of 14 years shall be employed to work in any factory or mines or engaged in any other hazardous employment.”

*A case study: According to the 2001 census, over 12 million children in India aged between 5 and 14 work in various occupations including hazardous ones. In October 2006, the government amended the Child Labour Prevention Act, banning children under 14 years of age from working as domestic servants or as workers in dhabas, restaurants, tea shops etc. It made employing these children a punishable offence. Anyone found violating the ban must be penalised with a punishment ranging from a jail term of three months to two years and/or fine of Rs 10,000 to Rs 20,000. The central government had asked state governments to develop plans to rescue and rehabilitate children who are working as domestic servants. To date, only three state governments, namely Maharashtra, Karnataka and Tamil Nadu have published these plans. Even today more than a year after this law was passed 74 per cent of child domestic workers are under the age of 16.*

### What is a Worker's Worth?

If we are to understand the events leading to Bhopal disaster, we have to ask: why did Union Carbide set up its plant in India?

One reason why foreign companies come to India is for cheap labour. Wages that the companies pay to workers, say in the U.S.A., are far higher than what they have to pay to workers in poorer countries like India. For lower pay, companies can get longer hours of work. Additional expenses such as for housing facilities for workers are also fewer. Thus, companies can save costs and earn higher profits.

Cost cutting can also be done by other more dangerous means. Lower working conditions including lower safety measures are used as ways of cutting costs. Thousands of people killed in Union Carbide gas leak in Bhopal Gas Disaster in 1984. Read the following comparison between Union Carbide safety system in Bhopal and its other plant in the US: *At West Virginia (U.S.A.) computerised warning and monitoring systems were in place, whereas the UC plant in Bhopal relied on*

*manual gauges and the human senses to detect gas leaks. At the West Virginia plant, emergency evacuation plans were in place, but nonexistent in Bhopal.*

*Why are there such sharp differences in safety standards across countries? And even after the disaster happened, why was the compensation to the victims so low?*

One part of the answer lies in what is perceived as the worth of an Indian worker. One worker can easily replace another. Since there is so much unemployment, there are many workers who are willing to work in unsafe conditions in return for a wage. Making use of the workers' vulnerability, employers ignore safety in workplaces. Thus, even so many years after the Bhopal gas tragedy, there are regular reports of accidents in construction sites, mines or factories due to the callous attitude of the employers.

### Enforcement of Safety Laws

As the lawmaker and enforcer, the government is supposed to ensure that safety laws are implemented. It is also the duty of the government to ensure that the Right to Life guaranteed under Article 21 of the Constitution is not violated. What was the government doing when there were such blatant violations of safety standards in the UC plant?

First, the safety laws were lax in India. Second, even these weak safety laws were not enforced.

Government officials refused to recognise the plant as hazardous and allowed it to come up in a populated locality. When some municipal officials in Bhopal objected that the installation of an MIC production unit in 1978 was a safety violation, the position of the government was that the state needs the continued **investment** of the Bhopal plant, which provides jobs. It was unthinkable, according to them, to ask UC to shift to cleaner technology or safer procedures. Government inspectors continued to approve the procedures in the plant, even when repeated incidents of leaks from the plant made it obvious to everybody that things were seriously wrong.

This, as you know, is contrary to what the role of a law-making and enforcement agency should be. Instead of protecting the interests of the people, their safety was being disregarded both by the government and by private companies. This is obviously not at all desirable. With more industries being set up both by local and foreign businesses in India, there is a great need for stronger laws protecting workers' rights and better enforcement of these laws.

### New Laws to Protect the Environment

In 1984, there were very few laws protecting the environment in India, and there was hardly any enforcement of these laws. The environment was treated as a 'free' entity and any industry could pollute the air and water without any restrictions. Whether it was our rivers, air, groundwater – the environment was being polluted and the health of people disregarded. Thus, not only was UC a beneficiary of lower safety standards, it didn't have to spend any money to clean up the pollution. In the U.S.A., this is a necessary part of the production process.

The Bhopal disaster brought the issue of environment to the forefront. Several thousands of persons who were not associated with the factory in any way were greatly affected because of the poisonous gases leaked from the plant. This made people realise that the existing laws, though weak, only covered the individual worker and not persons who might be injured due to industrial accidents.



In response to this pressure from environmental activists and others, in the years following the Bhopal gas tragedy, the Indian government introduced new laws on the environment. Henceforth, the polluter was to be held accountable for the damage done to environment. The environment is something that people over generations will share, and it could not be destroyed merely for industrial development. The courts also gave a number of judgments upholding the right to a healthy environment as intrinsic to the Fundamental Right to Life. In *Subhash Kumar vs. State of Bihar* (1991), the Supreme Court held that the Right to Life is a Fundamental Right under Article 21 of the Constitution and it includes the right to the enjoyment of pollution-free water and air for full enjoyment of life. The government is responsible for setting up laws and procedures that can check pollution, clean rivers and introduce heavy fines for those who pollute.

### Environment as a Public Facility

In recent years, while the courts have come out with strong orders on environmental issues, these have sometimes affected people's livelihoods adversely. For instance, the courts directed industries in residential areas in Delhi to close down or shift out of the city. Several of these industries were polluting the neighbourhood and discharge from these industries was polluting the river Yamuna, because they had been set up without following the rules.

But, while the court's action solved one problem, it created another. Because of the closure, many workers lost their jobs. Others were forced to go to far-away places where these factories had relocated. And the same problem now began to come up in these areas – for now these places became polluted. And the issue of the safety conditions of workers remained unaddressed. Recent research on environmental issues in India has highlighted the fact that the growing concern for the environment among the middle classes is often at the expense of the poor. So, for example, slums need to be cleaned as part of a city's beautification drive, or as in the case above, a polluting factory is moved to the outskirts of the city. And while this awareness of the need for a clean environment is increasing, there is little

concern for the safety of the workers themselves. The challenge is to look for solutions where everyone can benefit from a clean environment. One way this can be done is to gradually move to cleaner technologies and processes in factories. The government has to encourage and support factories to do this. It will need to fine those who pollute. This will ensure that the workers livelihoods are protected and both workers and communities living around the factories enjoy a safe environment.

### Conclusion

Laws are necessary in many situations, whether this be the market, office or factory so as to protect people from unfair practices. Private companies, contractors, business persons, in order to make higher profits, resort to unfair practices such as paying workers low wages, employing children for work, ignoring the conditions of work, ignoring the damage to the environment (and hence to the people in the neighbourhood) etc.

A major role of the government, therefore, is to control the activities of private companies by making, enforcing and upholding laws so as to prevent unfair practices and ensure social justice. This means that the government has to make 'appropriate laws' and also has to enforce the laws. Laws that are weak and poorly enforced can cause serious harm, as the Bhopal gas tragedy showed. While the government has a leading role in this respect, people can exert pressure so that both private companies and the government act in the interests of society. Environment, as we saw, is one example where people have pushed a public cause and the courts have upheld the right to healthy environment as intrinsic to the Right to Life. In this chapter, we have argued that people now must demand that this facility of healthy environment be extended to all. Likewise, workers' rights (right to work, right to a fair wage and decent work conditions) is an area where the situation is still very unfair. People must demand stronger laws protecting workers' interests so that the Right to Life is achieved for all.

# NCERT Class 9

## Political Science (Democratic Politics 1)

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 Democracy In The Contemporary World

##### OVERVIEW

This book is about democracy. In this first chapter we see how democracy has expanded during the last hundred years to more and more countries in the world. More than half of the independent countries in the world today are democracies. The expansion of democracy has not been smooth and straight. It has seen several ups and downs in different countries. It still remains an unstable and uncertain achievement. This chapter begins with different stories on the making and unmaking of democracy from different parts of the world. These stories are meant to give a sense of what it means to experience democracy and its absence. We present the pattern of the spread of democracy first with a series of maps and then with a short history. The focus in this chapter is on democracy within a country. But towards the end of the chapter, we take a look at democracy or its absence in the relations among different countries. We examine the working of some international organisations. This allows us to ask a big question: are we moving towards democracy at the global level?

##### Two Tales Of Democracy Democracy in Chile

Allende was the founder leader of the Socialist Party of Chile and led the Popular Unity **coalition** to victory in the presidential election in 1970. After being elected the President, Allende had taken several policy decisions to help the poor and the workers. These included reform of the educational system, free milk for children and redistribution of land to the landless farmers. He was opposed to foreign companies taking away natural resources like copper from the country. The landlords, the rich and the Church opposed his policies. Some other political parties in Chile also opposed his government. *Why did President Allende address himself mainly to 'workers'? Why were the rich unhappy with him?*

What took place in Chile on 11 September 1973 was a military **coup**. General Augusto Pinochet (pronounced Pinoshe), an Army general, led the coup. The government of the United States of America was unhappy with Allende's rule and is known to have supported and funded activities that led to the coup. Thus a military dictatorship was established in Chile. Pinochet's government tortured and killed several of those who supported Allende and those who wanted democracy to be restored. More than 3,000 people were killed by the military.

Pinochet's military dictatorship came to an end after he decided to hold a **referendum** in 1988. He felt confident that in this referendum, the people would say 'yes' to his continuing in power. But the people of Chile had not forgotten their democratic traditions. Their vote was a decisive 'no' to Pinochet. This led to Pinochet losing first his political and then his military powers. Political freedom was restored. Since then Chile has held four presidential elections in which different political parties have participated. Slowly, the army's role in the country's government has been eliminated.

##### Democracy in Poland

Let us turn to another event, this time from Poland, in 1980. At that time Poland was ruled by the Polish United Workers' Party. This was one of the many communist parties that ruled in several countries of East Europe at that time. In these countries no other political party was allowed to function. The people could not freely choose the leaders of the communist party or the government. On 14 August 1980, the workers of Lenin Shipyard in the city of Gdansk went on a **strike**. The shipyard was owned by the government. In fact all the factories and big property in Poland were owned by the government. This strike was illegal, because **trade unions** independent of the ruling party were not allowed in Poland. The strike began to spread across the whole city. Now the workers started raising larger demands. They wanted the right to form independent trade unions. They also demanded the release of **political prisoners** and an end to censorship on press.

The movement became so popular that the government had to give in. The workers led by Walesa signed a 21-point agreement with the government that ended their strike. The government agreed to recognise the workers' right to form independent trade unions and their right to strike. Another wave of strikes, again organised by Solidarity (trade union), began in 1988. This time the Polish government was weaker, the support from Soviet Union uncertain and the economy was in decline. Another round of negotiations with Walesa resulted in an agreement in April 1989 for free elections. Solidarity contested all the 100 seats of the Senate and won 99 of them. In October 1990, Poland had its first presidential elections in which more than one party could contest. Walesa was elected President of Poland.

##### Two Features of Democracy

We have read two different kinds of real life stories. The story from Chile was of a democratic government led by Allende being replaced by a non-democratic military government of Pinochet, followed by restoration of democracy. In Poland we tracked the transition from a non-democratic government to a democratic government.

Let us compare the two non-democratic governments

in these stories. There were many differences between Pinochet's rule in Chile and the communist rule in Poland. Chile was ruled by a military dictator, while Poland was ruled by a political party. The government of Poland claimed that it was ruling on behalf of the working classes. Pinochet made no such claim and openly favoured big capitalists. Yet both had some common features:

- The people could not choose or change their rulers.
- There was no real freedom to express one's opinions, form political associations and organise protests and political action.

The democratic governments identified above — Allende's Chile, Walesa's Poland and Bachelet's Chile — are different in their approach towards social and economic matters. Allende preferred government control on all big industries and the economy. Walesa wanted the market to be free of government interference. Bachelet stands somewhere in the middle on this issue. Yet these three governments shared some basic features. Power was exercised by governments elected by the people and not by the army, unelected leaders or any external power. The people enjoyed some basic political freedoms.

From these two stories let us draw a rough way to identify a democracy. **Democracy is a form of government that allows people to choose their rulers.** In a democracy:

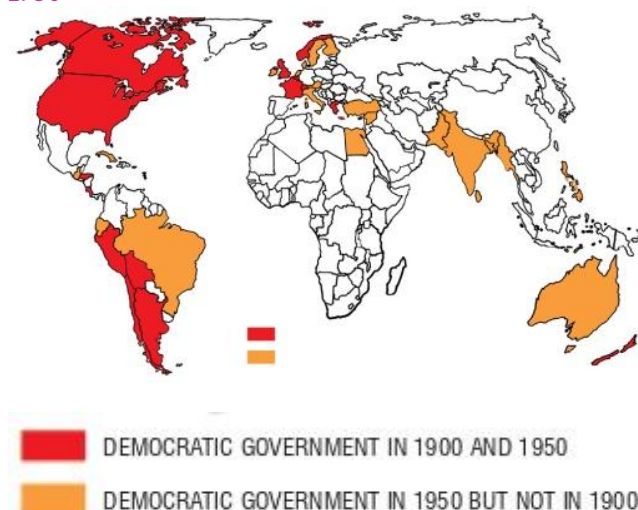
- only leaders elected by people should rule the country, and
- people have the freedom to express views, freedom to organise and freedom to protest.

We shall come back to this question in Chapter Two and develop a definition of democracy. We shall also note some features of a democracy.

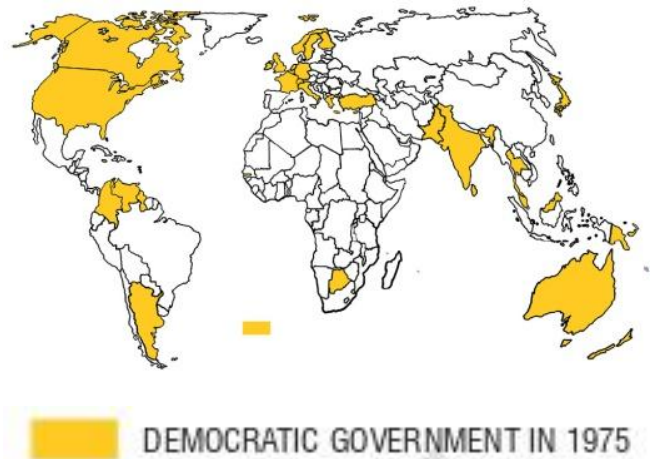
### The Changing Map of Democracy

This is what the three maps shown here do. Take a look at these three maps below and find out if there was a pattern in the way democracies have evolved in the twentieth century. The first map depicts the countries that were democratic in 1950, a few years after the end of the Second World War. This map also shows countries from this set that had already become democratic by 1900. The second map presents a picture of democratic regimes in 1975, after most of the colonies had gained independence. Finally, we take another leap and look at democracies in the year 2000, at the beginning of the twenty-first century.

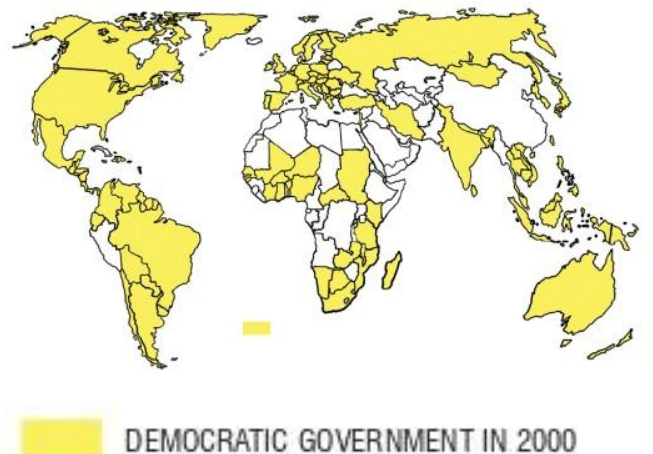
**MAP1.1: DEMOCRATIC GOVERNMENTS IN 1900-1950**



**MAP1.2: DEMOCRATIC GOVERNMENTS IN 1975**



**MAP1.3: DEMOCRATIC GOVERNMENTS IN 2000**



Let us summarise the main points that emerge from a reading of these maps. You need to go back to the maps to answer the question that comes after each point.

- **Democracy has expanded throughout the twentieth century.** Is it correct to say that at each point in these maps, the number of democratic countries is larger than at the previous point in time?
- **Democracy did not spread evenly in all parts of the world. It was established first in some regions and then spread to other regions.** Which continents in the world had a large number of democracies in 1900 and 1950? And which continents did not have almost any?
- **While a majority of countries are democratic today, there are still large parts of the world that are not democratic.** Which regions in the world account for most of the countries that were not democracies in 2000?

### 1.3 Phases in the Expansion of Democracy

#### The Beginning

These maps do not tell us much about what happened before the twentieth century. The story of modern democracy began at least two centuries ago. You may have read the chapter on the French Revolution of 1789 in the history book of this course. This popular uprising did not establish a secure and stable democracy in France. Throughout the nineteenth century, democracy in France was overthrown and restored several times. Yet the French Revolution inspired many struggles for democracy all over Europe.

In Britain, the progress towards democracy started much before the French Revolution. But the progress was very slow. Through the eighteenth and the nineteenth centuries, series of political events reduced



the power of monarchy and feudal lords. The right to vote was granted to more and more people. Around the same time as the French Revolution, the British colonies in North America declared themselves independent in 1776. In the next few years these colonies came together to form the United States of America. They adopted a democratic constitution in 1787. But here too the right to vote was limited to very few men.

In the nineteenth century struggles for democracy often centred round political equality, freedom and justice. One major demand was the right for every adult citizen to vote. Many European countries that were becoming more democratic did not initially allow all people to vote. In some countries only people owning property had the right to vote. Often women did not have the right to vote. In the United States of America, the blacks all over the country could not exercise the right to vote until 1965. Those struggling for democracy wanted this right granted universally to all adults — men or women, rich or poor, white or black. This is called 'universal adult franchise' or 'universal suffrage'.

### End of Colonialism

For a very long time most countries in Asia and Africa were colonies under the control of European nations. People of the colonised countries had to wage struggles to achieve independence. They not only wanted to get rid of their colonial masters, but also wished to choose their future leaders. Our country was one of the few colonies where people carried a nationalist struggle to liberate the country from the colonial rule. Many of these countries became democracies immediately after the end of the Second World War in 1945. India achieved Independence in 1947 and embarked on its journey to transform itself from a subject country to a democracy. It continues to be a democracy. Most former colonies did not have such a good experience.

### Recent phase

The next big push towards democracy came after 1980, as democracy was revived in several countries of Latin America. The disintegration of the Soviet Union accelerated this process. From the story of Poland we know that the then Soviet Union controlled many of its neighbouring communist countries in Eastern Europe. Poland and several other countries became free from the control of the Soviet Union during 1989-90. They chose to become democracies. Finally the Soviet Union itself broke down in 1991. The Soviet Union comprised 15 Republics. All the constituent Republics emerged as independent countries. Most of them became democracies. Thus the end of Soviet control on East Europe and the break up of the Soviet Union led to a big change in the political map of the world.

In this period major changes also took place in India's neighbourhood. Pakistan and Bangladesh made a transition from army rule to democracy in 1990s. In Nepal, the king gave up many of his powers to become a constitutional monarch to be guided by elected leaders. However, these changes were not permanent. In 1999 General Musharraf brought back army rule in Pakistan. In 2005 the new king of Nepal dismissed the elected government and took back political freedoms that people had won in the previous decade.

Yet the overall trend in this period points to more and more countries turning to democracy. This phase still continues. By 2005, about 140 countries were holding multi-party elections. This number was higher than ever before. More than 80 previously non-democratic countries have made significant advances towards

democracy since 1980. But, even today, there are many countries where people cannot express their opinion freely. They still cannot elect their leaders. They cannot take big decisions about their present and future life.

One such country is Myanmar, previously known as Burma. It gained freedom from colonial rule in 1948 and became a democracy. But the democratic rule ended in 1962 with a military coup. In 1990 elections were held for the first time after almost 30 years. The National League for Democracy, led by Aung San Suu Kyi (pronounced Soo-chi), won the election. But the military leaders of Myanmar refused to step down and did not recognise the election results. Instead, the military put the elected pro-democracy leaders, including Suu Kyi, under house arrest. Political activists accused of even the most trivial offences have been jailed. Anyone caught publicly airing views or issuing statements critical of the regime can be sentenced up to twenty years in prison. Due to the coercive policies of the military-ruled government in Myanmar, about 6 to 10 lakh people in that country have been uprooted from their homes and have taken shelter elsewhere.

Despite being under house arrest, Suu Kyi continued to campaign for democracy. According to her: "The quest for democracy in Burma is the struggle of the people to live whole, meaningful lives as free and equal members of the world community." Her struggle has won international recognition. She has also been awarded the Nobel Peace Prize. Yet the people in Myanmar are still struggling to establish a democratic government in their country.

*What should be the policy of the government of India towards the military rulers of Myanmar?*

### International Organisations

Let us respond to the question that came up in this conversation: Does an increase in the number of democratic countries all over the world automatically lead to democratic relations among countries? Before we do that, let us think about the point raised by Surinder. There is a government of India, a government of the United States of America, and so on. But there is no government of the world. No government can pass any law that will apply to all the people of the world. If there is no such government, if there are no rulers and ruled, how can we apply the two features of democracy here? These two features, you would recall, were that the rulers should be elected by the people and that people should have basic political freedoms.

*Should there be a world government? If yes, who should elect it? And, what powers should it have?*

*Should the permanent members of the UN be given the power to veto?*

- Who makes laws and rules to govern the seas that do not fall within the boundaries of any one country? Or who takes steps to control environmental degradation that threatens all the countries together. The United Nations (UN) has evolved many Conventions on these questions that are now binding on most countries of the world. The UN is a global association of nations of the world to help cooperation in international law, security, economic development and social equity. The UN Secretary General is its chief administrative officer.

- What happens when a country attacks another country in an unjust manner? The UN Security Council, an organ of the UN, is responsible for maintaining peace and security among countries. It can put together an international army and take action against the wrongdoer.

- Who lends money to governments when they need it?

The International Monetary Fund (IMF) does so. The World Bank also gives loans to the governments. Before lending they ask the concerned government to show all its accounts and direct it to make changes in its economic policy.

### Are these decisions democratic?

So, there are many institutions at the world level that perform some of the functions that a world government would perform. But we need to know just how democratic these organisations are. The yardstick here is whether each of the countries has free and equal say in the decisions that affect them. In this light let us examine the organisation of some of these world bodies. Every one of the 193 member states (as on 1 September 2012) of the UN has one vote in the UN General Assembly. It meets in regular yearly sessions under a president elected from among the representatives of the member countries. General Assembly is like the parliament where all the discussion takes place. In that sense the UN would appear to be a very democratic organisation. But the General Assembly cannot take any decision about what action should be taken in a conflict between different countries.

The fifteen-member Security Council of the UN takes such crucial decisions. The Council has five permanent members – US, Russia, UK, France and China. Ten other members are elected by the General Assembly for two-year terms. The real power is with five permanent members. The permanent members, especially the US, contribute most of the money needed for the maintenance of the UN. Each permanent member has veto power. It means that the Council cannot take a decision if any permanent member says no to that decision. This system has led more and more people and countries to protest and demand that the UN becomes more democratic.

International Monetary Fund (IMF) is one of the biggest moneylenders for any country in the world. Its 188 member states (as on 1 September 2012) do not have equal voting rights. The vote of each country is weighed by how much money it has contributed to the IMF. More than 52% of the voting power in the IMF is in the hands of only ten countries (US, Japan, Germany, France, UK, China, Italy, Saudi Arabia, Canada and Russia). The remaining 178 countries have very little say in how these international organisations take decisions. The World Bank has a similar system of voting. The President of the World Bank has always been a citizen of the US, conventionally nominated by the Treasury Secretary (Finance Minister) of the US government. Compare these to the kind of democratic practices that we have been discussing in this chapter. What would you say about a country where some persons have a permanent position in the ministry and have the power to stop the decision of the entire parliament? Or a parliament where five per cent of the members hold a majority of votes? Would you call these democratic? Most of the global institutions fail to pass the simple test of democracy that we use for national governments. If global institutions are not democratic, are they at least becoming more democratic than before? Here too the evidence is not very encouraging. In fact, while nations are becoming more democratic than they were earlier, international organisations are becoming less democratic. Twenty years ago there were two big powers in the world: the US and the Soviet Union. The competition and conflict between these two big powers and their allies kept a certain balance in all the global

organisations. After the collapse of the Soviet Union, the US appears to be the only superpower in the world. This American dominance affects the working of international organisations.

This is not to say that there is no urge or move towards global democracy. The urge comes from people who get more opportunities to come in touch with one another. Over the last few years the people of different countries have come together without their governments' support. They have formed global organisations against war and against domination of the world by a few countries and business companies. As in the case of democracy within the nations, the initiative for democracy among nations has come from the struggles of the people.

*Here are some suggestions to strengthen world democracy. Do you support these changes? Are these changes likely to happen? Give your reasons for each of these.*

- More nations should become permanent members of the Security Council.
- UN General Assembly should become like a world parliament with representatives from each country in proportion to the population of the country. These representatives should elect a world government.
- Individual countries should not have armies. The UN should maintain task forces to bring about peace in case of conflict between nations.
- A UN President should be elected directly by all the people of the world.

### Democracy promotion

Take a close look at the two cartoons on this and on the next page. These cartoons raise a fundamental question related to global democracy. Recently, many powerful countries in the world, particularly the United States of America, have taken on the task of democracy promotion in the rest of the world. They say that propagating the values of democracy is not enough. Existing democracies should directly intervene in countries that are non-democratic to establish democracy there. In some cases powerful countries have launched armed attack on non-democratic countries. This is what Sushmita was talking about.

### Iraq

Let us see what happened in Iraq. Iraq is a country in Western Asia. It became independent from British rule in 1932. Three decades later there were a series of coups by military officers. Since 1968, it was ruled by Arab Socialist Ba'th Party (the Arabic word Ba'th means renaissance). Saddam Hussein, a leading Ba'th party leader, played a key role in the 1968 coup that brought the party to power. This government abolished traditional Islamic law and gave women the right to vote and several freedoms not granted in other west Asian countries. After becoming the president of Iraq in 1979, Saddam ran a dictatorial government and suppressed any dissent or opposition to his rule. He was known to have got a number of political opponents killed and persons of ethnic minorities massacred.

The US and its allies like Britain, alleged that Iraq possessed secret nuclear weapons and other 'weapons of mass destruction' which posed a big threat to the world. But when a UN team went to Iraq to search for such weapons, it did not find any. Still the US and its allies invaded Iraq, occupied it and removed Saddam Hussein from power in 2003. The US installed an interim government of its preference. The war against Iraq was not authorised by the UN Security Council.

Kofi Annan, the UN Secretary General, said that the US war on Iraq was illegal.



*'Helping Democracy' was a comment on the presence of US forces during the elections in Iraq. Do you think the cartoon can apply to many other situations? Identify some examples from this chapter which this cartoon can help understand.*

*The example of Iraq raises some basic questions that we need to think about:*

- Is this the right way to promote democracy? Should a democratic country wage a war and invade other countries for establishing democracy there?
- Does external help work in every case? Or does it work only when the people of a nation are actively engaged in a struggle to make their societies democratic?
- Even if external intervention leads to the establishment of democracy in a country, would it last long? Would it enjoy the support of its citizens?
- Finally, is the use of external force to gift democracy to the people in keeping with the spirit of democracy?

**Important Terms** **Censorship:** A condition under which the freedom of expression is taken away. Citizens have to take prior permission from the censor authorities of the government for making a speech or publishing news and views. Anything that the government finds objectionable cannot be published. **Coalition:** An alliance of people, associations, parties or nations. This alliance may be temporary or a matter of convenience. **Colony:** Territory under the immediate political control of another state. **Communist state:** A state governed by a communist party without allowing other parties to compete for power. The state controls all the big property and industry. **Coup:** A coup d'état (pronounced ku de'ta), or simply a coup, is the sudden overthrow of a government illegally. It may or may not be violent in nature. The term is French for 'a sudden blow or strike to a state'. **Martial law:** A system of rules that takes effect when a military authority takes control of the normal administration of justice. **Political prisoners:** Persons held in prison or otherwise detained, perhaps under house arrest, because a government considers their ideas, image or activities as a threat to the authority of the state. Often exaggerated or false cases are foisted on them and they are kept in detention without following normal law. **Referendum:** A direct vote in which an entire electorate is asked to either accept or reject a particular proposal. This may be adoption of a new constitution, a law or a specific governmental policy. **State:** Political association occupying a definite territory, having an organised government and possessing power to make domestic and foreign policies. Governments may change, but the state continues. In common speech, the terms country, nation and state are used as synonyms. **Strike:** Mass refusal by workers or employees to perform work due to certain grievances or because of demands not met. In most democratic countries the right to strike is legal. **Trade Union:** An association of workers for the purpose of maintaining or

improving the conditions of their employment. **Veto:** The right of a person, party or nation to stop a certain decision or law. The word comes from Latin, which means 'i forbid'. a veto gives unlimited power to stop a decision, but not to adopt one.

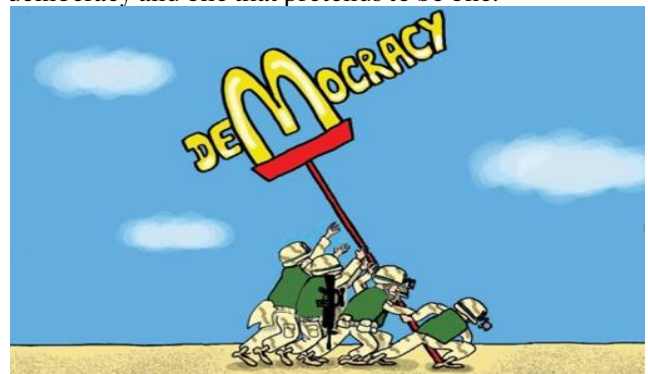
## Chapter 2 What Is Democracy? Why Democracy?

### Overview

The stories and the analysis in the previous chapter gave us a sense of what democracy is like. There we described some governments as democratic and some as non-democratic. This chapter builds on a simple definition of democracy. Step by step, we work out the meaning of the terms involved in this definition. The aim here is to understand clearly the bare minimum features of a democratic form of government. Towards the end of this chapter, we step beyond this minimal objective and introduce a broader idea of democracy. In the previous chapter, we have seen that democracy is the most prevalent form of government in the world today and it is expanding to more countries. But why is it so? What makes it better than other forms of government? That is the second big question that we take up in this chapter.

### What is Democracy?

We will start with a simple definition: **democracy is a form of government in which the rulers are elected by the people.** This is a useful starting point. This definition allows us to separate democracy from forms of government that are clearly not democratic. As per this definition the following types of governments are not democratic: the governments by army rulers such as of Myanmar, Dictatorships, Monarchies such as the kings of Nepal and Saudi Arabia. This simple definition is not adequate. It reminds us that democracy is people's rule. But if we use this definition in an unthinking manner, we would end up calling almost every government that holds an election a democracy. That would be very misleading. We need to carefully distinguish between a government that is a democracy and one that pretends to be one.



*This cartoon was drawn when elections were held in Iraq with the presence of US and other foreign powers. What do you think this cartoon is saying? Why is 'democracy' written the way it is?*

### Features of democracy

We have started with a simple definition that **democracy is a form of government in which the rulers are elected by the people.** This raises many questions:

- Who are **the rulers** in this definition? Which officials must be elected for any government to be called a democracy? Which decisions may be taken by non-



elected officials in a democracy?

- What kind of **election** constitutes a democratic election? What conditions must be fulfilled for an election to be considered democratic?
- Who are **the people** who can elect the rulers or get elected as rulers? Should this include every citizen on an equal basis? Can a democracy deny some citizens this right?
- Finally, what kind of a **form of government** is democracy? Can elected rulers do whatever they want in a democracy? Or must a democratic government function with some limits? Is it necessary for a democracy to respect some rights of the citizens? Let us consider each of these questions with the help of some examples.

### Major decisions by elected leaders

In Pakistan, General Pervez Musharraf led a military coup in October 1999. He overthrew a democratically elected government and declared himself the 'Chief Executive' of the country. Later he changed his designation to President and in 2002 held a referendum in the country that granted him a five-year extension. Pakistani media, human rights organisations and democracy activists said that the referendum was based on malpractices and fraud. In August 2002 he issued a 'Legal Framework Order' that amended the Constitution of Pakistan. According to this Order, the President can dismiss the national and provincial assemblies. The work of the civilian cabinet is supervised by a National Security Council which is dominated by military officers. After passing this law, elections were held to the national and provincial assemblies. So Pakistan has had elections, elected representatives have some powers. But the final power rests with military officers and General Musharraf himself.

Clearly, there are many reasons why Pakistan under General Musharraf should not be called a democracy. But let us focus on one of these. Can we say that the rulers are elected by the people in Pakistan? Not quite. People may have elected their representatives to the national and provincial assemblies but those elected representatives are not really the rulers. They cannot take the final decisions. The power to take final decision rests with army officials and with General Musharraf, and none of them are elected by the people. This happens in many dictatorships and monarchies. They formally have an elected parliament and government but the real power is with those who are not elected. Take the case of the role of the USSR in communist Poland and that of the US in contemporary Iraq. Here the real power was with some external powers and not with locally elected representatives. This cannot be called people's rule.

This gives us the first feature. **In a democracy the final decision-making power must rest with those elected by the people.**



*Syria is a small west Asian country. The ruling Ba'ath Party and some of its small allies are the only parties allowed in that country. Do you think this cartoon could apply to China or Mexico? What does the crown of leaves on democracy signify?*

### Free and fair electoral competition

In China, elections are regularly held after every five years for electing the country's parliament, called Quanguo Renmin Daibiao Dahui (National People's Congress). The National People's Congress has the power to appoint the President of the country. It has nearly 3,000 members elected from all over China. Some members are elected by the army. Before contesting elections, a candidate needs the approval of the Chinese Communist Party. Only those who are members of the Chinese Communist Party or eight smaller parties allied to it were allowed to contest elections held in 2002-03. The government is always formed by the Communist Party. Since its independence in 1930, Mexico holds elections after every six years to elect its President. The country has never been under a military or dictator's rule. But until 2000 every election was won by a party called PRI (Institutional Revolutionary Party). Opposition parties did contest elections, but never managed to win. The PRI was known to use many dirty tricks to win elections. All those who were employed in government offices had to attend its party meetings. Teachers of government schools used to force parents to vote for the PRI. Media largely ignored the activities of opposition political parties except to criticise them. Sometimes the polling booths were shifted from one place to another in the last minute, which made it difficult for people to cast their votes. The PRI spent a large sum of money in the campaign for its candidates.

Should we consider the elections described above as examples of people electing their rulers? Reading these examples we get a sense that we cannot. There are many problems here. In China the elections do not offer the people any serious choice. They have to choose the ruling party and the candidates approved by it. Can we call this a choice? In the Mexican example, people seemed to really have a choice but in practice they had no choice. There was no way the ruling party could be defeated, even if people were against it. These are not fair elections.

We can thus add a second feature to our understanding of democracy. Holding elections of any kind is not sufficient. The elections must offer a real choice between political alternatives. And it should be possible for people to use this choice to remove the existing rulers, if they wish so. So, **a democracy must be based on a free and fair election where those currently in power have a fair chance of losing.** We shall find out

more about a democratic election in Chapter Four.

### One person, one vote, one value

In the previous chapter we read about how the struggle for democracy was linked to the demand for universal adult franchise. This principle has now come to be accepted almost all over the world. Yet there are many instances of denial of equal right to vote.

- In Saudi Arabia women do not have the right to vote.
- Estonia has made its citizenship rules in such a way that people belonging to Russian minority find it difficult to get the right to vote.
- In Fiji, the electoral system is such that the vote of an indigenous Fijian has more value than that of an Indian-Fijian.

Democracy is based on a fundamental principle of political equality. That gives us the third feature of democracy: **in a democracy, each adult citizen must have one vote and each vote must have one value.** We shall read more about it in Chapter Four.

### Rule of law and respect for rights

Zimbabwe attained independence from White minority rule in 1980. Since then the country has been ruled by ZANU-PF, the party that led the freedom struggle. Its leader, Robert Mugabe, has been ruling the country since independence. Elections have been held regularly and always won by ZANU-PF. President Mugabe is popular but also uses unfair practices in elections. Over the years his government has changed the constitution several times to increase the powers of the President and make him less accountable. Opposition party workers are harassed and their meeting disrupted. Public protests and demonstrations against the government are declared illegal. Government harasses those journalists who go against it. The government has ignored some court judgments that went against it and has pressurised judges.

*Why talk about Zimbabwe? I read similar reports from many parts of our own country. Why don't we discuss that?*

The example of Zimbabwe shows that popular approval of the rulers is necessary in a democracy, but it is not sufficient. Popular governments can be undemocratic. Popular leaders can be autocratic. If we wish to assess a democracy, it is important to look at the elections. But it is equally important to look before and after the elections. There should be sufficient room for normal political activity, including political opposition, in the period before elections. This requires that the state should respect some basic rights of the citizen. They should be free to think, to have opinions, to express these in public, to form associations, to protest and take other political actions. Everyone should be equal in the eyes of law. These rights must be protected by an independent judiciary whose orders are obeyed by everyone. We shall read more about these rights in Chapter Six.

Similarly, there are some conditions that apply to the way a government is run after the elections. A democratic government cannot do whatever it likes, simply because it has won an election. It has to respect some basic rules. In particular it has to respect some guarantees to the minorities. Every major decision has to go through a series of consultations. Every office bearer has certain rights and responsibilities assigned by the constitution and the law. Each of these is accountable not only to the people but also to other independent officials. We shall read more about this in Chapter Five.

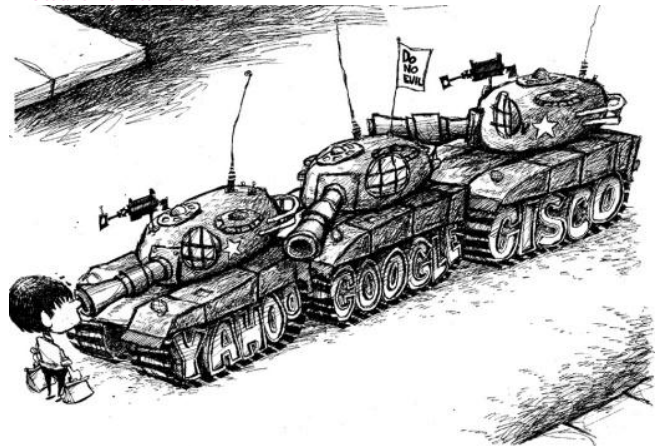
Both these aspects give us the fourth and final feature of democracy: **a democratic government rules within limits set by constitutional law and citizens' rights.**

### Summary definition

Let us sum up the discussion so far. We started with a simple definition that **democracy is a form of government in which the rulers are elected by the people.** We found that this definition was not adequate unless we explained some of the key words used in it. Through a series of examples we worked out four features of democracy as a form of government. Accordingly, democracy is a form of government in which:

- Rulers elected by the people take all the major decisions;
- Elections offer a choice and fair opportunity to the people to change the current rulers;
- This choice and opportunity is available to all the people on an equal basis; and
- The exercise of this choice leads to a government limited by basic

### Read the cartoon



*Chinese government blocked free flow of information on the internet by placing restrictions on popular websites like 'Google' and 'Yahoo'. The image of tanks and an unarmed student reminds the reader of another major event in recent Chinese history. Find out about that event.*

### Debating merits of democracy

#### Arguments against democracy

This conversation has most of the arguments that we routinely hear against democracy. Let us go over some of these arguments:

- Leaders keep changing in a democracy. This leads to instability.
- Democracy is all about political competition and power play. There is no scope for morality.
- So many people have to be consulted in a democracy that it leads to delays.
- Elected leaders do not know the best interest of the people. It leads to bad decisions.
- Democracy leads to corruption for it is based on electoral competition.
- Ordinary people don't know what is good for them; they should not decide anything.

Are there some other arguments against democracy that you can think of? Which of these arguments applies mainly to democracy? Which of these can apply to misuse of any form of government? Which of these do you agree with?

Clearly, democracy is not a magical solution for all the problems. It has not ended poverty in our country and in other parts of the world. Democracy as a form of

government only ensures that people take their own decisions. This does not guarantee that their decisions will be good. People can make mistakes. Involving the people in these decisions does lead to delays in decision making. It is also true that democracy leads to frequent changes in leadership. Sometimes this can set back big decisions and affect the government's efficiency. These arguments show that democracy of the kind we see may not be the ideal form of government. But that is not a question we face in real life. The real question we face is different: is democracy better than other forms of government that are there for us to choose from?

### Arguments for democracy

China's famine of 1958-1961 was the worst recorded famine in world history. Nearly three crore people died in this famine. During those days, India's economic condition was not much better than China. Yet India did not have a famine of the kind China had. Economists think that this was a result of different government policies in the two countries. The existence of democracy in India made the Indian government respond to food scarcity in a way that the Chinese government did not. They point out that no large-scale famine has ever taken place in an independent and democratic country. If China too had multiparty elections, an opposition party and a press free to criticise the government, then so many people may not have died in the famine.

This example brings out one of the reasons why democracy is considered the best form of government. Democracy is better than any other form of government in responding to the needs of the people. A non-democratic government may and can respond to the people's needs, but it all depends on the wishes of the people who rule. If the rulers don't want to, they don't have to act according to the wishes of the people. A democracy requires that the rulers have to attend to the needs of the people. **A democratic government is a better government because it is a more accountable form of government.**

There is another reason why democracy should lead to better decisions than any non-democratic government. Democracy is based on consultation and discussion. A democratic decision always involves many persons, discussions and meetings. When a number of people put their heads together, they are able to point out possible mistakes in any decision. This takes time. But there is a big advantage in taking time over important decisions. This reduces the chances of rash or irresponsible decisions. **Thus democracy improves the quality of decision-making.**

This is related to the third argument. **Democracy provides a method to deal with differences and conflicts.** In any society people are bound to have differences of opinions and interests. These differences are particularly sharp in a country like ours which has an amazing social diversity. People belong to different regions, speak different languages, practise different religions and have different castes. They look at the world very differently and have different preferences. The preferences of one group can clash with those of other groups. How do we resolve such a conflict? The conflict can be solved by brutal power. Whichever group is more powerful will dictate its terms and others will have to accept that. But that would lead to resentment and unhappiness. Different groups may not be able to live together for long in such a way. Democracy provides the only peaceful solution to this problem. In democracy, no one is a permanent winner.

No one is a permanent loser. Different groups can live with one another peacefully. In a diverse country like India, democracy keeps our country together. These three arguments were about the effects of democracy on the quality of government and social life. But the strongest argument for democracy is not about what democracy does to the government. It is about what democracy does to the citizens. Even if democracy does not bring about better decisions and accountable government, it is still better than other forms of government. **Democracy enhances the dignity of citizens.** As we discussed above, democracy is based on the principle of political equality, on recognising that the poorest and the least educated has the same status as the rich and the educated. People are not subjects of a ruler, they are the rulers themselves. Even when they make mistakes, they are responsible for their conduct. Finally, democracy **is better than other forms of government because it allows us to correct its own mistakes.** As we saw above, there is no guarantee that mistakes cannot be made in democracy. No form of government can guarantee that. The advantage in a democracy is that such mistakes cannot be hidden for long. There is a space for public discussion on these mistakes. And there is a room for correction. Either the rulers have to change their decisions, or the rulers can be changed. This cannot happen in a non-democratic government.

Let us sum it up. Democracy cannot get us everything and is not the solution to all problems. But it is clearly better than any other alternative that we know. It offers better chances of a good decision, it is likely to respect people's own wishes and allows different kinds of people to live together. Even when it fails to do some of these things, it allows a way of correcting its mistakes and offers more dignity to all citizens. That is why democracy is considered the best form of government.

### Broader meanings of democracy

In this chapter we have considered the meaning of democracy in a limited and descriptive sense. We have understood democracy as a form of government. This way of defining democracy helps us to identify a clear set of minimal features that a democracy must have. The most common form that democracy takes in our times is that of a representative democracy. You have already read about this in the previous classes. In the countries we call democracy, all the people do not rule. A majority is allowed to take decisions on behalf of all the people. Even the majority does not rule directly. The majority of people rule through their elected representatives. This becomes necessary because:

- Modern democracies involve such a large number of people that it is physically impossible for them to sit together and take a collective decision.
- Even if they could, the citizen does not have the time, the desire or the skills to take part in all the decisions. This gives us a clear but minimal understanding of democracy. This clarity helps us to distinguish democracies from non-democracies. But it does not allow us to distinguish between a democracy and a good democracy. It does not allow us to see the operation of democracy beyond government. For this we need to turn to broader meanings of democracy. Sometimes we use democracy for organisations other than the government. Just read these statements:
- "We are a very democratic family. Whenever a decision has to be taken, we all sit down and arrive at a consensus. My opinion matters as much as my father's."
- "I don't like teachers who do not allow students to



speak and ask questions in the class. I would like to have teachers with democratic temperament.”

- “One leader and his family members decide everything in this party. How can they talk of democracy?”

These ways of using the word democracy go back to its basic sense of a method of taking decisions. A democratic decision involves consultation with and consent of all those who are affected by that decision. Those who are not powerful have the same say in taking the decision as those who are powerful. This can apply to a government or a family or any other organisation. Thus democracy is also a principle that can be applied to any sphere of life.

Sometimes we use the word democracy not to describe any existing government but to set up an ideal standard that all democracies must aim to become:

- “True democracy will come to this country only when no one goes hungry to bed.”

- “In a democracy every citizen must be able to play equal role in decision making. For this you don’t need just an equal right to vote. Every citizen needs to have equal information, basic education, equal resources and a lot of commitment.”

If we take these ideals seriously, then no country in the world is a democracy. Yet an understanding of democracy as an ideal reminds us of why we value democracy. It enables us to judge an existing democracy and identify its weaknesses. It helps us to distinguish between a minimal democracy and a good democracy. In this book we do not deal much with this expanded notion of democracy. Our focus here is with some core institutional features of democracy as a form of government. Next year you will read more about a democratic society and ways of evaluating our democracy. At this stage we just need to note that democracy can apply to many spheres of life and that democracy can take many forms. There can be various ways of taking decisions in a democratic manner, as long as the basic principle of consultation on an equal basis is accepted. The most common form of democracy in today’s world is rule through people’s elected representatives. We shall read more about that in Chapter Four. But if the community is small, there can be other ways of taking democratic decisions. All the people can sit together and take decisions directly. This is how Gram Sabha should work in a village. Can you think of some other democratic ways of decision making?

This also means that no country is a perfect democracy. The features of democracy that we discussed in this chapter provide only the minimum conditions of a democracy. That does not make it an ideal democracy. Every democracy has to try to realise the ideals of a democratic decision-making. This cannot be achieved once and for all. This requires a constant effort to save and strengthen democratic forms of decision-making. What we do as citizens can make a difference to making our country more or less democratic. This is the strength and the weakness of democracy: the fate of the country depends not just on what the rulers do, but mainly on what we, as citizens, do.

This is what distinguished democracy from other governments. Other forms of government like monarchy, dictatorship or one-party rule do not require all citizens to take part in politics. In fact most non-democratic governments would like citizens not to take part in politics. But democracy depends on active political participation by all the citizens. That is why a study of democracy must focus on democratic politics.

**Important Terms** **Constitutional monarchy:** A government headed by a king or queen whose powers are limited by a constitution. **Non-democratic Government:** A form of government in which people do not elect their rulers and have no right in decision making. **Accountable government:** The government elected by the people and therefore responsible to them. **Dictatorship:** Under dictatorship all the powers are vested in a single person or in a group of people. **Minimal democracy:** A system of government in which citizens give teams of political leaders the right to rule in periodic elections. **Representative democracy:** A type of democracy founded on the principle of elected officials representing a group of people, as opposed to direct democracy.

## Chapter 3 Constitutional Design

### Overview

We noted in the previous chapter that in a democracy the rulers are not free to do what they like. There are certain basic rules that the citizens and the government have to follow. All such rules together are called constitution. As the supreme law of the country, the constitution determines the rights of citizens, the powers of the government and how the government should function.

In this chapter we ask some basic questions about the constitutional design of a democracy. Why do we need a constitution? How are the constitutions drawn up? Who designs them and in what way? What are the values that shape the constitutions in democratic states? Once a constitution is accepted, can we make changes later as required by the changing conditions?

One recent instance of designing constitution for a democratic state is that of the South Africa. We begin this chapter by looking at what happened there and how the South Africans went about this task of designing their constitution. Then we turn to how the Indian Constitution was made, what its foundational values are, and how it provides a good framework for the conduct of citizens’ life and that of the government.

### Democratic constitution in South Africa

#### Struggle against apartheid

Apartheid was the name of a system of racial discrimination unique to South Africa. The white Europeans imposed this system on South Africa. During the seventeenth and eighteenth centuries, the trading companies from Europe occupied it with arms and force, in the way they occupied India. But unlike India, a large number of ‘whites’ had settled in South Africa and became the local rulers. The system of apartheid divided the people and labelled them on the basis of their skin colour. The native people of South Africa are black in colour. They made up about three-fourth of the population and were called ‘blacks’. Besides these two groups, there were people of mixed races who were called ‘coloured’ and people who migrated from India. The white rulers treated all non-whites as inferiors. The non-whites did not have voting rights.

The apartheid system was particularly oppressive for the blacks.

Since 1950, the blacks, coloured and Indians fought against the apartheid system. They launched protest marches and strikes. The African National Congress (ANC) was the umbrella organisation that led the struggle against the policies of segregation. This included many workers’ unions and the Communist Party. Many sensitive whites also joined the ANC to oppose apartheid and played a leading role in this

struggle. Several countries denounced apartheid as unjust and racist. But the white racist government continued to rule by detaining, torturing and killing thousands of black and coloured people.

### **Towards a new constitution**

As protests and struggles against apartheid had increased, the government realised that they could no longer keep the blacks under their rule through repression. The white regime changed its policies. Discriminatory laws were repealed. Ban on political parties and restrictions on the media were lifted. After 28 years of imprisonment, Nelson Mandela walked out of the jail as a free man. Finally, at the midnight of 26 April 1994, the new national flag of the Republic of South Africa was unfurled marking the newly born democracy in the world. The apartheid government came to an end, paving way for the formation of a multi-racial government.

After two years of discussion and debate they came out with one of the finest constitutions the world has ever had. This constitution gave to its citizens the most extensive rights available in any country. The South African constitution inspires democrats all over the world. A state denounced by the entire world till recently as the most undemocratic one is now seen as a model of democracy.

### **Why do we need a constitution?**

Every country has diverse groups of people. All over the world people have differences of opinion and interests. Whether democratic or not, most countries in the world need to have these basic rules. This applies not just to governments. Any association needs to have its constitution. It could be a club in your area, a cooperative society or a political party, they all need a constitution.

Thus, the constitution of a country is a set of written rules that are accepted by all people living together in a country. Constitution is the supreme law that determines the relationship among people living in a territory (called citizens) and also the relationship between the people and government. A constitution does many things:

- First, it generates a degree of trust and coordination that is necessary for different kind of people to live together;
- Second, it specifies how the government will be constituted, who will have power to take which decisions;
- Third, it lays down limits on the powers of the government and tells us what the rights of the citizens are; and
- Fourth, it expresses the aspirations of the people about creating a good society.

All countries that have constitutions are not necessarily democratic. But all countries that are democratic will have constitutions. After the War of Independence against Great Britain, the Americans gave themselves a constitution. After the Revolution, the French people approved a democratic constitution. Since then it has become a practice in all democracies to have a written constitution.

### **Making of the Indian Constitution**

Like South Africa, India's Constitution was also drawn up under very difficult circumstances. The making of the constitution for a huge and diverse country like India was not an easy affair. The country was born through a partition on the basis of religious differences. The British had left it to the rulers of the princely states

to decide whether they wanted to merge with India or with Pakistan or remain independent. The merger of these princely states was a difficult and uncertain task.

### **The path to Constitution**

Despite all these difficulties, there was one big advantage for the makers of the Indian Constitution. Unlike South Africa, they did not have to create a consensus about what a democratic India should look like. Much of this consensus had evolved during the freedom struggle. Our national movement was not merely a struggle against a foreign rule. It was also a struggle to rejuvenate our country and to transform our society and politics. There were sharp differences of opinion within the freedom struggle about the path India should take after Independence. Such differences exist even today. Yet some basic ideas had come to be accepted by almost everyone.

As far back as in 1928, Motilal Nehru and eight other Congress leaders drafted a constitution for India. In 1931, the resolution at the Karachi session of the Indian National Congress dwelt on how independent India's constitution should look like. Both these documents were committed to the inclusion of universal adult franchise, right to freedom and equality and to protecting the rights of minorities in the constitution of independent India. Thus some basic values were accepted by all leaders much before the Constituent Assembly met to deliberate on the Constitution. The familiarity with political institutions of colonial rule also helped develop an agreement over the institutional design. The British rule had given voting rights only to a few. On that basis the British had introduced very weak legislatures. Elections were held in 1937 to Provincial Legislatures and Ministries all over British India. These were not fully democratic governments. But the experience gained by Indians in the working of the legislative institutions proved to be very useful for the country in setting up its own institutions and working in them. That is why the Indian constitution adopted many institutional details and procedures from colonial laws like the Government of India Act, 1935.

Years of thinking and deliberation on the framework of the constitution had another benefit. Our leaders gained confidence to learn from other countries, but on our own terms. Many of our leaders were inspired by the ideals of French Revolution, the practice of parliamentary democracy in Britain and the Bill of Rights in the US. The socialist revolution in Russia had inspired many Indians to think of shaping a system based on social and economic equality. Yet they were not simply imitating what others had done. At each step they were questioning whether these things suited our country. All these factors contributed to the making of our Constitution.

### **The Constituent Assembly**

Who, then, were the makers of the Indian Constitution? You will find here very brief sketch of some of the leaders who played an important role in making the Constitution.

The drafting of the document called the constitution was done by an assembly of elected representatives called the Constituent Assembly.

Elections to the Constituent Assembly were held in July 1946. Its first meeting was held in December 1946. Soon after, the country was divided into India and Pakistan. The Constituent Assembly was also divided into the Constituent Assembly of India and that of Pakistan. The Constituent Assembly that wrote the Indian constitution

had 299 members. The Assembly adopted the Constitution on 26 November 1949 but it came into effect on 26 January 1950. To mark this day we celebrate January 26 as Republic Day every year. Why should we accept the Constitution made by this Assembly more than fifty years ago? We have already noted one reason above. The Constitution does not reflect the views of its members alone. It expresses a broad consensus of its time. Many countries of the world have had to rewrite their Constitution afresh because the basic rules were not accepted to all major social groups or political parties. In some other countries, the Constitution exists as a mere piece of paper. No one actually follows it. The experience of our Constitution is different. Over the last half a century, several groups have questioned some provisions of the Constitution. But no large social group or political party has ever questioned the legitimacy of the Constitution itself. This is an unusual achievement for any constitution.

The second reason for accepting the Constitution is that the Constituent Assembly represented the people of India. There was no universal adult franchise at that time. So the Constituent Assembly could not have been chosen directly by all the people of India. It was elected mainly by the members of the existing Provincial Legislatures that we mentioned above. This ensured a fair geographical share of members from all the regions of the country. The Assembly was dominated by the Indian National Congress, the party that led India's freedom struggle. But the Congress itself included a variety of political groups and opinions. The Assembly had many members who did not agree with the Congress. In social terms too, the Assembly represented members from different language groups, castes, classes, religions and occupations. Even if the Constituent Assembly was elected by universal adult franchise, its composition would not have been very different. Finally, the manner in which the Constituent Assembly worked gives sanctity to the Constitution. The Constituent Assembly worked in a systematic, open and consensual manner. First some basic principles were decided and agreed upon. Then a Drafting Committee chaired by Dr. B.R. Ambedkar prepared a draft constitution for discussion. Several rounds of thorough discussion took place on the Draft Constitution, clause by clause. More than two thousand amendments were considered. The members deliberated for 114 days spread over three years. Every document presented and every word spoken in the Constituent Assembly has been recorded and preserved. These are called 'Constituent Assembly Debates'. When printed, these debates are 12 bulky volumes. These debates provide the rationale behind every provision of the Constitution. These are used to interpret the meaning of the Constitution.

### Guiding values of the Indian Constitution

In this book we shall study the exact provisions of the Constitution on different subjects. At this stage let us begin by understanding the overall philosophy of what our Constitution is all about. We can do this in two ways. We can understand it by reading the views of some of our major leaders on our Constitution. But it is equally important to read what the Constitution says about its own philosophy. This is what the preamble to the Constitution does. Let us turn to these, one by one.

### Philosophy of the Constitution

Values that inspired and guided the freedom struggle

and were in turn nurtured by it, formed the foundation for India's democracy. These values are embedded in the Preamble of the Indian Constitution. They guide all the articles of the Indian Constitution. The Constitution begins with a short statement of its basic values. This is called the Preamble to the constitution. Taking inspiration from American model, most countries in the contemporary world have chosen to begin their constitutions with a preamble.

Let us read the Preamble of our Constitution very carefully and understand the meaning of each of its key words.

The Preamble of the Constitution reads like a poem on democracy. It contains the philosophy on which the entire Constitution has been built. It provides a standard to examine and evaluate any law and action of government, to find out whether it is good or bad. It is the soul of the Indian Constitution.

### WE, THE PEOPLE OF INDIA

The constitution has been drawn up and enacted by the people through their representatives, and not handed down to them by a king or any outside powers.

### SOVEREIGN

People have supreme right to make decisions on internal as well as external matters. No external power can dictate the government of India.

### SOCIALIST

Wealth is generated socially and should be shared equally by society. Government should regulate the ownership of land and industry to reduce socio-economic inequalities.

### SECULAR

Citizens have complete freedom to follow any religion. But there is no official religion. Government treats all religious beliefs and practices with equal respect.

### DEMOCRATIC

A form of government where people enjoy equal political rights, elect their rulers and hold them accountable. The government is run according to some basic rules.

### REPUBLIC

The head of the state is an elected person and not a hereditary position.

### JUSTICE

Citizens cannot be discriminated on the grounds of caste, religion and gender. Social inequalities have to be reduced. Government should work for the welfare of all, especially of the disadvantaged groups.

### LIBERTY

There are no unreasonable restrictions on the citizens in what they think, how they wish to express their thoughts and the way they wish to follow up their thoughts in action.

### EQUALITY

All are equal before the law. The traditional social inequalities have to be ended. The government should ensure equal opportunity for all.

### FRATERNITY

All of us should behave as if we are members of the same family. No one should treat a fellow citizen as inferior.

### Institutional design

A constitution is not merely a statement of values and philosophy. As we noted above, a constitution is mainly about embodying these values into institutional arrangements. Much of the document called Constitution of India is about these arrangements. It is a very long and detailed document. Therefore it needs to be amended quite regularly to keep it updated. Those



who crafted the Indian Constitution felt that it has to be in accordance with people's aspirations and changes in society. They did not see it as a sacred, static and unalterable law. So, they made provisions to incorporate changes from time to time. These changes are called constitutional amendments. The Constitution describes the institutional arrangements in a very legal language. If you read the Constitution for the first time, it can be quite difficult to understand. Yet the basic institutional design is not very difficult to understand. Like any Constitution, the Indian Constitution lays down a procedure for choosing persons to govern the country. It defines who will have how much power to take which decisions. And it puts limits to what the government can do by providing some rights to the citizen that cannot be violated. The remaining three chapters in this book are about these three aspects of the working of Indian constitution. We shall look at some key constitutional provisions in each chapter and understand how they work in democratic politics. But this textbook will not cover all the salient features of the institutional design in the Indian Constitution. Some other aspects will be covered in your textbook next year.

### **glossary**

**Apartheid:** The official policy of racial separation and ill treatment of blacks followed by the government of South Africa between 1948 and 1989.

**Clause:** A distinct section of a document.

**Constituent Assembly:** An assembly of people's representatives that writes a constitution for a country.

**Constitution:** Supreme law of a country, containing fundamental rules governing the politics and society in a country.

**Constitutional amendment:** A change in the constitution made by the supreme legislative body in a country.

**Draft:** A preliminary version of a legal document.

**Philosophy:** The most fundamental principles underlying one's thoughts and actions.

**Preamble:** An introductory statement in a constitution which states the reasons and guiding values of the constitution.

**Treason:** The offence of attempting to overthrow the government of the state to which the offender owes allegiance.

**Tryst:** A meeting or meeting place that has been agreed upon.

**Important Terms African National Congress (ANC):** The umbrella organization that led the struggle against the policies of segregation. **Treason:** The offence of attempting to overthrow the government of the state for which the offender owes allegiance. **Constitution:** Supreme law of a country, containing fundamental rules governing the policies and society in a country. **Apartheid:** The official policy of racial separation and ill-treatment of blacks followed by the Government of South Africa between 1948 and 1989.

**Privilege:** A right reserved exclusively by a particular person or group (especially a hereditary or official right). **Political party:** A group of people with a definite agenda and who intend to acquire power in the government. **Minority:** A small group of people within a community or country, differing from the main population in race, religion, language, or political persuasion. **Clause:** A distinct section of a document.

**Constituent Assembly:** An assembly of people's representatives that drafts a constitution for a country. **Constitutional amendment:** A change in the constitution made by the supreme legislative body in a country. **Draft:** A preliminary version of a legal document. **Preamble:** An introductory statement in a constitution which states the reasons and guiding values of the constitution. **Tryst:** A

meeting or meeting place that has been agreed upon.

## **Chapter 4** **Electoral Politics**

### **Overview**

In Chapter Two we have seen that in a democracy it is neither possible nor necessary for people to govern directly. The most common form of democracy in our times is for the people to govern through their representatives. In this chapter we will look at how these representatives are elected. We begin by understanding why elections are necessary and useful in a democracy. We try to understand how electoral competition among parties serves the people. We then go on to ask what makes an election democratic. The basic idea here is to distinguish democratic elections from non-democratic elections.

The rest of the chapter tries to assess elections in India in the light of this yardstick. We take a look at each stage of elections, from the drawing of boundaries of different constituencies to the declaration of results. At each stage we ask what should happen and what does happen in elections. Towards the end of the chapter, we turn to an assessment of whether elections in India are free and fair. Here we also examine the role of the Election Commission in ensuring free and fair elections.

### **Why Elections?**

#### **Why do we need elections?**

Let us try to imagine a democracy without elections. A rule of the people is possible without any elections if all the people can sit together everyday and take all the decisions. Surely not

Is there a democratic way of selecting representatives without elections? Let us think of a place where representatives are selected on the basis of age and experience. Or a place where they are chosen on the basis of education or knowledge. But can we call this place a democracy? How do we find out if the people like their representatives or not? How do we ensure that these representatives rule as per the wishes of the people? How to make sure that those who the people don't like do not remain their representatives? This requires a mechanism by which people can choose their representatives at regular intervals and change them if they wish to do so. This mechanism is called election. Therefore, elections are considered essential in our times for any representative democracy.

In an election the voters make many choices:

- They can choose who will make laws for them.
- They can choose who will form the government and take major decisions.
- They can choose the party whose policies will guide the government and law making.

#### **What makes an election democratic?**

Elections can be held in many ways. All democratic countries hold elections. But most non-democratic countries also hold some kind of elections. How do we distinguish democratic elections from any other election? We have discussed this question briefly in Chapter Two. We discussed many examples of countries where elections are held but they can't really be called democratic elections. Let us recall what we learnt there and start with a simple list of the minimum conditions of a democratic election:

- First, everyone should be able to choose. This means that everyone should have one vote and every vote should have equal value.

- Second, there should be something to choose from. Parties and candidates should be free to contest elections and should offer some real choice to the voters.
- Third, the choice should be offered at regular intervals. Elections must be held regularly after every few years.
- Fourth, the candidate preferred by the people should get elected.
- Fifth, elections should be conducted in a free and fair manner where people can choose as they really wish. These might look like very simple and easy conditions. But there are many countries where these are not fulfilled. In this chapter we will apply these conditions to the elections held in our own country to see if we can call these democratic elections.

### Is it good to have political competition?

Elections are thus all about political competition. This competition takes various forms. The most obvious form is the competition among political parties. At the constituency level, it takes the form of competition among several candidates. If there is no competition, elections will become pointless. But is it good to have political competition? Clearly, an electoral competition has many demerits. It creates a sense of disunity and 'factionalism' in every locality. You would have heard of people complaining of 'party-politics' in your locality. Different political parties and leaders often level allegations against one another. Parties and candidates often use dirty tricks to win elections. Some people say that this pressure to win electoral fights does not allow sensible long-term policies to be formulated. Some good people who may wish to serve the country do not enter this arena. They do not like the idea of being dragged into unhealthy competition.

Our Constitution makers were aware of these problems. Yet they opted for free competition in elections as the way to select our future leaders. They did so because this system works better in the long run. In an ideal world all political leaders know what is good for the people and are motivated only by a desire to serve them. Political competition is not necessary in such an ideal world. But that is not what happens in real life. Political leaders all over the world, like all other professionals, are motivated by a desire to advance their political careers. They want to remain in power or get power and positions for themselves. They may wish to serve the people as well, but it is risky to depend entirely on their sense of duty. Besides even when they wish to serve the people, they may not know what is required to do so, or their ideas may not match what the people really want. How do we deal with this real life situation? One way is to try and improve the knowledge and character of political leaders. The other and more realistic way is to set up a system where political leaders are rewarded for serving the people and punished for not doing so. Who decides this reward or punishment? The simple answer is: the people. This is what electoral competition does. Regular electoral competition provides incentives to political parties and leaders. They know that if they raise issues that people want to be raised, their popularity and chances of victory will increase in the next elections. But if they fail to satisfy the voters with their work they will not be able to win again. So if a political party is motivated only by desire to be in power, even then it will be forced to serve the people. This is a bit like the way market works. Even if a shopkeeper is interested only in his profit, he is forced to give good service to the customers. If he does not, the

customer will go to some other shop. Similarly, political competition may cause divisions and some ugliness, but it finally helps to force political parties and leaders to serve the people.



*Read these two cartoons carefully. Write the message of each of them in your own words. Have a discussion in class on which of the two is closer to the reality in your own locality. Draw a cartoon to depict what elections do to the relationship between voters and political leaders.*

### What Is Our System of Elections?

Can we say that Indian elections are democratic? To answer this question, let us take a look at how elections are held in India. Lok Sabha and Vidhan Sabha (Assembly) elections are held regularly after every five years. After five years the term of all the elected representatives comes to an end. The Lok Sabha or Vidhan Sabha stands 'dissolved'. Elections are held in all constituencies at the same time, either on the same day or within a few days. This is called a general election. Sometimes election is held only for one constituency to fill the vacancy caused by death or resignation of a member. This is called a by-election. In this chapter we will focus on general elections.

### Electoral constituencies

You read about the people of Haryana electing 90 MLAs. You may have wondered how they did that. Did every person in Haryana vote for all the 90 MLAs? You perhaps know that this is not the case. In our country we follow an area based system of representation. The country is divided into different areas for purposes of elections. These areas are called electoral constituencies. The voters who live in an area elect one representative. For Lok Sabha elections, the country is divided into 543 constituencies. The representative elected from each constituency is called a Member of Parliament or an MP. One of the features of a democratic election is that every vote should have equal value. That is why our Constitution requires that each constituency should have a roughly equal population living within it.

Similarly, each state is divided into a specific number of Assembly constituencies. In this case, the elected representative is called the Member of Legislative Assembly or an MLA. Each Parliamentary constituency has within it several assembly constituencies. The same principle applies for Panchayat and Municipal elections. Each village or town is divided into several 'wards' that are like constituencies. Each ward elects one member of the village or the urban local body. Sometimes these constituencies are counted as 'seats', for each constituency represents one seat in the assembly. When

we say that 'Lok Dal won 60 seats' in Haryana, it means that candidates of Lok Dal won in 60 assembly constituencies in the state and thus Lok Dal had 60 MLAs in the state assembly.

### Reserved Constituencies

Our Constitution entitles every citizen to elect her/his representative and to be elected as a representative. The Constitution makers, however, were worried that in an open electoral competition, certain weaker sections may not stand a good chance to get elected to the Lok Sabha and the state Legislative Assemblies. They may not have the required resources, education and contacts to contest and win elections against others. Those who are influential and resourceful may prevent them from winning elections. If that happens, our Parliament and Assemblies would be deprived of the voice of a significant section of our population. That would make our democracy less representative and less democratic.

So, the makers of our Constitution thought of a special system of reserved constituencies for the weaker sections. Some constituencies are reserved for people who belong to the Scheduled Castes [SC] and Scheduled Tribes [ST]. In a SC reserved constituency only someone who belongs to the Scheduled Castes can stand for election. Similarly only those belonging to the Scheduled Tribes can contest an election from a constituency reserved for ST. Currently, in the Lok Sabha, 84 seats are reserved for the Scheduled Castes and 47 for the Scheduled Tribes (as on 1 September 2012). This number is in proportion to their share in the total population. Thus the reserved seats for SC and ST do not take away the legitimate share of any other social group.

This system of reservation was extended later to other weaker sections at the district and local level. In many states, seats in rural (panchayat) and urban (municipalities and corporations) local bodies are now reserved for Other Backward Classes (OBC) as well. However, the proportion of seats reserved varies from state to state. Similarly, one-third of the seats are reserved in rural and urban local bodies for women candidates.

### Voters' list

Once the constituencies are decided, the next step is to decide who can and who cannot vote. This decision cannot be left to anyone till the last day. In a democratic election, the list of those who are eligible to vote is prepared much before the election and given to everyone. This list is officially called the Electoral Roll and is commonly known as the Voters' List.

This is an important step for it is linked to the first condition of a democratic election: everyone should get an equal opportunity to choose representatives. In Chapter One we read about the principle of universal adult franchise. In practice it means that everyone should have one vote and each vote should have equal value. No one should be denied the right to vote without a good reason. Different citizens differ from one another in many ways: some are rich, some are poor; some are highly educated, some are not so educated or not educated at all; some are kind, others are not so kind. But all of them are human beings with their own needs and views. That is why all of them deserve to have an equal say in decisions that affect them.

In our country, all the citizens aged 18 years and above can vote in an election. Every citizen has the right to vote, regardless of his or her caste, religion or gender.

Some criminals and persons with unsound mind can be denied the right to vote, but only in rare situations. It is the responsibility of the government to get the names of all the eligible voters put on the voters' list. As new persons attain voting age names are added to the voters' list. Names of those who move out of a place or those who are dead are deleted. A complete revision of the list takes place every five years. This is done to ensure that it remains up to date. In the last few years a new system of Election Photo Identity Card [EPIC] has been introduced. The government has tried to give this card to every person on the voters list. The voters are required to carry this card when they go out to vote, so that no one can vote for someone else. But the card is not yet compulsory for voting. For voting, the voters can show many other proofs of identity like the ration card or the driving licence.

### Nomination of candidates

We noted above that in a democratic election people should have a real choice. This happens only when there are almost no restrictions on anyone to contest an election. This is what our system provides. Anyone who can be a voter can also become a candidate in elections. The only difference is that in order to be a candidate the minimum age is 25 years, while it is only 18 years for being a voter. There are some other restrictions on criminals etc. but these apply in very extreme cases. Political parties nominate their candidates who get the party symbol and support. Party's nomination is often called party 'ticket'.

Every person who wishes to contest an election has to fill a 'nomination form' and give some money as 'security deposit'. Recently, a new system of declaration has been introduced on direction from the Supreme Court. Every candidate has to make a legal declaration, giving full details of:

- Serious criminal cases pending against the candidate;
- Details of the assets and liabilities of the candidate and his or her family; and
- Education qualifications of the candidate.

This information has to be made public. This provides an opportunity to the voters to make their decision on the basis of the information provided by the candidates.

### Educational qualifications for candidates

Why is there no educational qualification for holding such an important position when some kind of educational qualification is needed for any other job in the country?

- Educational qualifications are not relevant to all kinds of jobs. The relevant qualification for selection to the Indian cricket team, for example, is not the attainment of educational degrees but the ability to play cricket well. Similarly the relevant qualification for being an MLA or an MP is the ability to understand people's concerns, problems and to represent their interests. Whether they can do so or not is examined by lakhs of examiners — their voters — after every five years.
- Even if education was relevant, it should be left to the people to decide how much importance they give to educational qualifications.

• In our country putting an educational qualification would go against the spirit of democracy for yet another reason. It would mean depriving a majority of the country's citizens the right to contest elections. If, for example, a graduate degree like B.A., B.Com or B.Sc was made compulsory for candidates, more than 90 per cent of the citizens will become ineligible to contest elections.



## Election Campaign

The main purpose of election is to give people a chance to choose the representatives, the government and the policies they prefer. Therefore it is necessary to have a free and open discussion about who is a better representative, which party will make a better government or what is a good policy. This is what happens during election campaigns.

In our country such campaigns take place for a two-week period between the announcement of the final list of candidates and the date of polling. During this period the candidates contact their voters, political leaders address election meetings and political parties mobilise their supporters. This is also the period when newspapers and television news are full of election related stories and debates. But election campaign is not limited to these two weeks only. Political parties start preparing for elections months before they actually take place.

In election campaigns, political parties try to focus public attention on some big issues. They want to attract the public to that issue and get them to vote for their party on that basis. Let us look at some of the successful slogans given by different political parties in various elections.

- The Congress party led by Indira Gandhi gave the slogan of Garibi Hatao (Remove poverty) in the Lok Sabha elections of 1971. The party promised to reorient all the policies of the government to remove poverty from the country.
- Save Democracy was the slogan given by Janata Party in the next Lok Sabha election held in 1977. The party promised to undo the excesses committed during Emergency and restore civil liberties.
- The Left Front used the slogan of Land to the Tiller in the West Bengal Assembly elections held in 1977.
- 'Protect the Self-Respect of the Telugus' was the slogan used by N. T. Rama Rao, the leader of the Telugu Desam Party in Andhra Pradesh Assembly elections in 1983.

In a democracy it is best to leave political parties and candidates free to conduct their election campaigns the way they want to. But it is sometimes necessary to regulate campaigns to ensure that every political party and candidate gets a fair and equal chance to compete. According to our election law, no party or candidate can:

- Bribe or threaten voters;
- Appeal to them in the name of caste or religion;
- Use government resources for election campaign; and
- Spend more than Rs. 25 lakh in a constituency for a Lok Sabha election or Rs. 10 lakh in a constituency in an Assembly election.

If they do so, their election can be rejected by the court even after they have been declared elected. In addition to the laws, all the political parties in our country have agreed to a Model Code of Conduct for election campaigns. According to this, no party or candidate can:

- Use any place of worship for election propaganda;
- Use government vehicles, aircrafts and officials for elections; and
- Once elections are announced, Ministers shall not lay foundation stones of any projects, take any big policy decisions or make any promises of providing public facilities.

Draw a cartoon here about the Model Code of Conduct for the guidance of political parties and candidates during elections.

## Polling and counting of votes

The final stage of an election is the day when the voters cast or 'poll' their vote. That day is usually called the election day. Every person whose name is on the voters' list can go to a nearby 'polling booth', situated usually in a local school or a government office. Once the voter goes inside the booth, the election officials identify her, put a mark on her finger and allow her to cast her vote. An agent of each candidate is allowed to sit inside the polling booth and ensure that the voting takes place in a fair way.

## Are the elections too expensive for our country?

A large amount of money is spent in conducting elections in India. For instance, the government spent about Rs.1,300 crores in conducting Lok Sabha elections in 2004. That works out to about Rs. 20 per person on the voters' list. The amount spent by parties and candidates was more than what the government spent. Roughly speaking, the expenditure made by government, parties and candidates was around Rs. 3,000 crores or Rs. 50 per voter.

Some people say that elections are a burden on our people, that our poor country cannot afford to hold elections once every five years. Let us compare this expenditure with some other figures:

- In 2005, our government decided to buy six nuclear submarines from France. Each submarine cost about Rs. 3,000 crores.
- Delhi hosted the Commonwealth Games in 2010. The estimate for its cost is more than Rs. 10,000 crores.

Are the elections too expensive? You decide.

Earlier the voters used to indicate who they wanted to vote for by putting a stamp on the ballot paper. A ballot paper is a sheet of paper on which the names of the contesting candidates along with party name and symbols are listed. Nowadays electronic voting machines (EVM) are used to record votes. The machine shows the names of the candidates and the party symbols. Independent candidates too have their own symbols, allotted by election officials. All the voter has to do is to press the button against the name of the candidate she wants to give her vote.

Once the polling is over, all the EVMs are sealed and taken to a secure place. A few days later, on a fixed date, all the EVMs from a constituency are opened and the votes secured by each candidate are counted. The agents of all candidates are present there to ensure that the counting is done properly. The candidate who secures the highest number of votes from a constituency is declared elected. In a general election, usually the counting of votes in all the constituencies takes place at the same time, on the same day. Television channels, radio and newspapers report this event. Within a few hours of counting, all the results are declared and it becomes clear as to who will form the next government.

## What Makes Elections in India Democratic?

We get to read a lot about unfair practices in elections. Newspapers and television reports often refer to such allegations. Most of these reports are about the following:

- Inclusion of false names and exclusion of genuine names in the voters' list;
  - Misuse of government facilities and officials by the ruling party;
  - Excessive use of money by rich candidates and big parties; and
  - Intimidation of voters and rigging on the polling day.
- Many of these reports are correct. We feel unhappy when we read or see such reports. But fortunately they are not on such a scale so as to defeat the very purpose

of elections. This becomes clear if we ask a basic question: Can a party win an election and come to power not because it has popular support but through electoral malpractices? This is a vital question. Let us carefully examine various aspects of this question.

### Independent Election Commission

One simple way of checking whether elections are fair or not is to look at who conducts the elections. Are they independent of the government? Or can the government or the ruling party influence or pressurise them? Do they have enough powers to be able to conduct free and fair elections? Do they actually use these powers?

*Why does the Election Commission have so much powers? Is this good for democracy?*

The answer to all these questions is quite positive for our country. In our country elections are conducted by an independent and very powerful Election Commission (EC). It enjoys the same kind of independence that the judiciary enjoys. The Chief Election Commissioner (CEC) is appointed by the President of India. But once appointed, the Chief Election Commissioner is not answerable to the President or the government. Even if the ruling party or the government does not like what the Commission does, it is virtually impossible for it to remove the CEC. Very few election commissions in the world have such wide-ranging powers as the Election Commission of India.

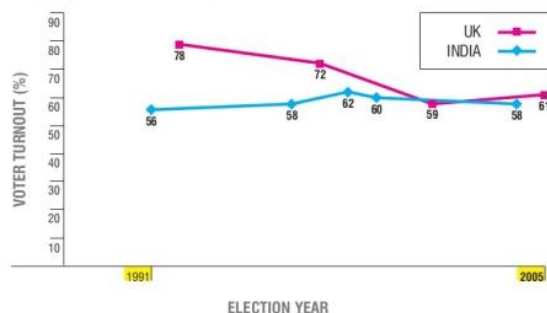
- EC takes decisions on every aspect of conduct and control of elections from the announcement of elections to the declaration of results.
- It implements the Code of Conduct and punishes any candidate or party that violates it.
- During the election period, the EC can order the government to follow some guidelines, to prevent use and misuse of governmental power to enhance its chances to win elections, or to transfer some government officials.
- When on election duty, government officers work under the control of the EC and not the government. In the last fifteen years or so, the Election Commission has begun to exercise all its powers and even expand them. It is very common now for the Election Commission to reprimand the government and administration for their lapses. When election officials come to the opinion that polling was not fair in some booths or even an entire constituency, they order a repoll. The ruling parties often do not like what the EC does. But they have to obey. This would not have happened if the EC was not independent and powerful.

### Popular participation

Another way to check the quality of the election process is to see whether people participate in it with enthusiasm. If the election process is not free or fair, people will not continue to participate in the exercise. Now, read these charts and draw some conclusions about participation in India:

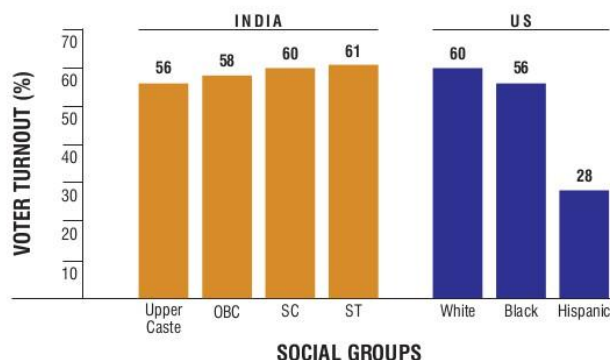
1. People's participation in election is usually measured by voter turnout figures. Turnout indicates the per cent of eligible voters who actually cast their vote. Over the last fifty years, the turnout in Europe and North America has declined. In India the turnout has either remained stable or actually gone up.

1 VOTER TURNOUT IN INDIA AND THE UK



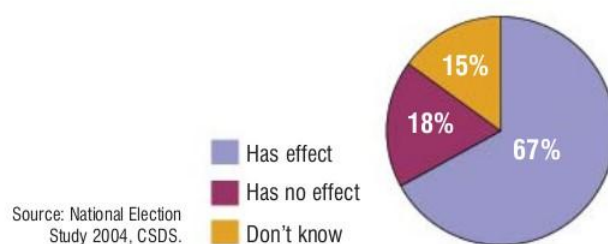
2. In India the poor, illiterate and underprivileged people vote in larger proportion as compared to the rich and privileged sections. This is in contrast to western democracies. For example in the United States of America, poor people, African Americans and Hispanics vote much less than the rich and the white people.

2 VOTER TURNOUT IN INDIA AND US BY SOCIAL GROUPS, 2004



3. Common people in India attach a lot of importance to elections. They feel that through elections they can bring pressure on political parties to adopt policies and programmes favourable to them. They also feel that their vote matters in the way things are run in the country.

3 DO YOU THINK YOUR VOTE MAKES A DIFFERENCE?



4. The interest of voters in election-related activities has been increasing over the years. During the 2004 elections, more than one-third voters took part in a campaign-related activities. More than half of the people identified themselves as being close to one or the other political party. One out of every seven voters is a member of a political party.

### Acceptance of election outcome

One final test of the free and fairness of election has in the outcome itself. If elections are not free or fair, the outcome always favours the powerful. In such a situation, the ruling parties do not lose elections. Usually, the losing party does not accept the outcome of a rigged election.

The outcome of India's elections speaks for itself:

- The ruling parties routinely lose elections in India both at the national and state level. In fact in every two out of the three elections held in the last fifteen years, the ruling party lost.
- In the US, an incumbent or 'sitting' elected

representative rarely loses an election. In India about half of the sitting MPs or MLAs lose elections.

- Candidates who are known to have spent a lot of money on 'buying votes' and those with known criminal connections often lose elections.
- Barring very few disputed elections, the electoral outcomes are usually accepted as 'people's verdict' by the defeated party.

### Challenges to free and fair elections

All this leads to a simple conclusion: elections in India are basically free and fair. The party that wins an election and forms government does so because people have chosen it over its rivals. This may not be true for every constituency. A few candidates may win purely on the basis of money power and unfair means. But the overall verdict of a general election still reflects popular preference. There are very few exceptions to this rule in the last fifty years in our country. This is what makes Indian elections democratic.

Yet the picture looks different if we ask deeper questions: Are people's preferences based on real knowledge? Are the voters getting a real choice? Is election really level playing field for everyone? Can an ordinary citizen hope to win elections? Questions of this kind bring the many limitations and challenges of Indian elections to our attention. These include:

- Candidates and parties with a lot of money may not be sure of their victory but they do enjoy a big and unfair advantage over smaller parties and independents.
  - In some parts of the country, candidates with criminal connection have been able to push others out of the electoral race and to secure a 'ticket' from major parties.
  - Some families tend to dominate political parties; tickets are distributed to relatives from these families.
  - Very often elections offer little choice to ordinary citizens, for both the major parties are quite similar to each other both in policies and practice.
  - Smaller parties and independent candidates suffer a huge disadvantage compared to bigger parties.
- These challenges exist not just in India but also in many established democracies. These deeper issues are a matter of concern for those who believe in democracy. That is why citizens, social activists and organisations have been demanding reforms in our electoral system. Can you think of some reforms? What can an ordinary citizen do to face these challenges?

**Important Terms** **Constituency:** A particular area from where voters elect a representative to the Lok Sabha/Vidhan Sabha. **Electorate:** It refers to the entire body of people who are qualified to vote in the elections for the legislatures or local bodies. **Franchise:** It refers to the right of people to vote and elect their representatives to make laws. **General elections:** Elections held after the term of 5 years of Lok Sabha are called general elections. **Mid Term election:** Sometimes, the Lok Sabha and the Vidhan Sabha are dissolved and an election is held before the expiry of their full term of five years. Such an election is called a mid-term election. **By-election:** An election may need to be held for a single constituency, due to the untimely death or resignation of an elected member. The election carried out to fill this vacancy is known as a by-election. **Universal adult franchise:** In our country, all the citizens who are 18 years and above can vote in an election. **Campaigning:** It refers to a process by which a candidate tries to persuade the voter to vote for him rather than for others. **Election photo identity Card:** The voters are required to carry this card when they go out to vote. **Voter's list:** List of those who are eligible to vote, that is prepared before the election. **Electoral roll:** Voter's list is also known as Electoral Roll. **Election manifesto:** A document published by every political party before elections containing the policies and programmes of that party. **Electronic voting machine:** A device used to record votes on an election day.

**Ballot paper:** A sheet on which the names of the candidates along with the party name and symbols are listed. **Code of conduct:** A set of norms and guidelines to be followed by political parties and contesting candidates during the election time. **Incumbent:** The current holder of a political office. **Impersonation:** An electoral malpractice in which a person assumes the identity of another for unlawful purposes is called impersonation. **Election Commission:** A parliamentary body constituted to conduct free and fair elections in the country.

## Chapter 5 Working Of Institutions

### Overview

Democracy is not just about people electing their rulers. In a democracy the rulers have to follow some rules and procedures. They have to work with and within institutions. This chapter is about the working of such institutions in a democracy. We try to understand this by looking at the manner in which major decisions are taken and implemented in our country. We also look at how disputes regarding these decisions are resolved. In this process we come across three institutions that play a key role in major decisions – legislature, executive and judiciary.

What does this institution do? How is this institution connected to other institutions? What makes its functioning more or less democratic? The basic objective here is to understand how all these institutions together carry on the work of government. Sometimes we compare these with similar institutions in other democracies. In this chapter we take our examples from the working of the national level government called Central Government, Union Government, or just Government of India. While reading this chapter, you can think of and discuss examples from the working of the government in your state.

### How is a Major Policy Decision Taken?

#### Let's understand by a case Study: The Mandal Commission

#### A Government Order

On August 13, 1990, the Government of India issued an Order. This Order announced a major policy decision. It said that 27 per cent of the vacancies in civil posts and services under the Government of India are reserved for the Socially and Educationally Backward Classes (SEBC). SEBC is another name for all those people who belong to castes that are considered backward by the government. The benefit of job reservation was till then available only to Scheduled Castes and Scheduled Tribes. Now a new third category called SEBC was introduced. Only persons who belong to backward castes were eligible for this quota of 27 per cent jobs. Others could not compete for these jobs.

#### The Decision Makers

Who decided to issue this Order (Memorandum)?

- President is the head of the state and is the highest formal authority in the country.
- Prime Minister is the head of the government and actually exercises all governmental powers. He takes most of the decisions in the Cabinet meetings.
- Parliament consists of two Houses, Lok Sabha and Rajya Sabha. The Prime Minister must have the support of a majority of Lok Sabha members.

*So, were all these people involved in this decision regarding the Office Memorandum? Let us find out.* This Office Memorandum was the culmination of a long chain of events. The Government of India had



appointed the Second Backward Classes Commission in 1979. It was headed by B.P. Mandal. Hence it was popularly called the Mandal Commission. It was asked to determine the criteria to identify the socially and educationally backward classes in India and recommend steps to be taken for their advancement. The Commission gave its Report in 1980 and made many recommendations. One of these was that 27 per cent of government jobs be reserved for the socially and Educationally backward classes. The Report and recommendations were discussed in the Parliament. For several years, many parliamentarians and parties kept demanding the implementation of the Commission's recommendations. Then came the Lok Sabha election of 1989. In its election manifesto, the Janata Dal promised that if voted to power, it would implement the Mandal Commission report. The Janata Dal did form the government after this election. Its leader V. P. Singh became the Prime Minister. Several developments took place after that:

- The President of India in his address to the Parliament announced the intention of the government to implement the recommendations of the Mandal Commission.
- On 6 August 1990, the Union Cabinet took a formal decision to implement the recommendations.
- Next day Prime Minister V.P. Singh informed the Parliament about this decision through a statement in both the Houses of Parliament.
- The decision of the Cabinet was sent to the Department of Personnel and Training. The senior officers of the Department drafted an order in line with the Cabinet decision and took the minister's approval. An officer signed the order on behalf of the Union Government. This was how O.M. No. 36012/ 31/90 was born on August 13, 1990.

For the next few months, this was the most hotly debated issue in the country. Newspapers and magazines were full of different views and opinions on this issue. It led to widespread protests and counter-protests, some of which were violent. People reacted strongly because this decision affected thousands of job opportunities. Some felt that existence of inequalities among people of different castes in India necessitated job reservations. They felt, this would give a fair opportunity to those communities who so far had not adequately been represented in government employment.

Others felt that this was unfair as it would deny equality of opportunity to those who did not belong to backward communities. They would be denied jobs even though they could be more qualified. Some felt that this would perpetuate caste feelings among people and hamper national unity. In this chapter we won't discuss whether the decision was good or not. We only take this example to understand how major decisions are taken and implemented in the country.

*Who resolved this dispute?* You know that the Supreme Court and the High Courts in India settle disputes arising out of governmental decisions. Some persons and associations opposed to this order filed a number of cases in the courts. They appealed to the courts to declare the order invalid and stop its implementation. The Supreme Court of India bunched all these cases together. This case was known as the 'Indira Sawhney and others Vs Union of India case'. Eleven judges of the Supreme Court heard arguments of both sides. By a majority, the Supreme Court judges in 1992 declared that this order of the Government of India was valid. At

the same time the Supreme Court asked the government to modify its original order. It said that well-to-do persons among the backward classes should be excluded from getting the benefit of reservation. Accordingly, the Department of Personnel and Training issued another Office Memorandum on September 8, 1993. The dispute thus came to an end and this policy has been followed since then.

### Need for Political Institutions

We have seen one example of how the government works. Governing a country involves various such activities. For example, the government is responsible for ensuring security to the citizens and providing facilities for education and health to all. It collects taxes and spends the money thus raised on administration, defence and development programmes. It formulates and implements several welfare schemes. Some persons have to take decisions on how to go about these activities. Others have to implement these decisions. If disputes arise on these decisions or in their implementation, there should be someone to determine what is right and what is wrong. It is important that everyone should know who is responsible for doing what. It is also important that these activities keep taking place even if the persons in key positions change. So, to attend to all these tasks, several arrangements are made in all modern democracies. Such arrangements are called institutions. A democracy works well when these institutions perform functions assigned to them. The Constitution of any country lays down basic rules on the powers and functions of each institution. In the example above we saw several such institutions at work.

- The Prime Minister and the Cabinet are institutions that take all important policy decisions.
  - The Civil Servants, working together, are responsible for taking steps to implement the ministers' decisions.
  - Supreme Court is an institution where disputes between citizens and the government are finally settled.
- Working with institutions is not easy. Institutions involve rules and regulations. This can bind the hands of leaders. Institutions involve meetings, committees and routines. This often leads to delays and complications. Therefore dealing with institutions can be frustrating. One might feel that it is much better to have one person take all decisions without any rules, procedures and meetings. But that is not the spirit of democracy. Some of the delays and complications introduced by institutions are very useful. They provide an opportunity for a wider set of people to be consulted in any decision. Institutions make it difficult to have a good decision taken very quickly. But they also make it equally difficult to rush through a bad decision. That is why democratic governments insist on institutions.

### Parliament

#### Why do we need a Parliament?

In all democracies, an assembly of elected representatives exercises supreme political authority on behalf of the people. In India such a national assembly of elected representatives is called Parliament. At the state level this is called Legislature or Legislative Assembly. The name may vary in different countries, but such an assembly exists in every democracy. It exercises political authority on behalf of the people in many ways:

1. Parliament is the final authority for making laws in any country. This task of law making or legislation is so crucial that these assemblies are called legislatures. Parliaments all over the world can make new laws,

change existing laws, or abolish existing laws and make new ones in their place.

2. Parliaments all over the world exercise some control over those who run the government. In some countries like India this control is direct and full. Those who run the government can take decisions only so long as they enjoy support of the Parliament.

3. Parliaments control all the money that governments have. In most countries any the public money can be spent only when the Parliament sanctions it.

4. Parliament is the highest forum of discussion and debate on public issues and national policy in any country. Parliament can seek information about any matter.

### Two Houses of Parliament

Since the Parliament plays a central role in modern democracies, most large countries divide the role and powers of the Parliament in two parts. They are called Chambers or Houses. One House is usually directly elected by the people and exercises the real power on behalf of the people. The second House is usually elected indirectly and performs some special functions. The most common work for the second House is to look after the interests of various states, regions or federal units.

In our country, the Parliament consists of two Houses. The two Houses are known as the Council of States (Rajya Sabha) and the House of the People (Lok Sabha). The President of India is a part of the Parliament, although she is not a member of either House. That is why all laws made in the Houses come into force only after they receive the assent of the President.

Some key differences between the composition of these two Houses of Parliament. Answer the following for the Lok Sabha and the Rajya Sabha:

- What is the total number of members? ...
- Who elects the members? ...
- What is the length of the term (in years)?
- Can the House be dissolved or is it permanent? ...

Which of the two Houses is more powerful? It might appear that the Rajya Sabha is more powerful, for sometimes it is called the 'Upper Chamber' and the Lok Sabha the 'Lower Chamber'. But this does not mean that Rajya Sabha is more powerful than Lok Sabha. This is just an old style of speaking and not the language used in our Constitution.

*Our Constitution does give the Rajya Sabha some special powers over the states. But on most matters, the Lok Sabha exercises supreme power. Let us see how:*

1. Any ordinary law needs to be passed by both the Houses. But if there is a difference between the two Houses, the final decision is taken in a joint session in which members of both the Houses sit together. Because of the larger number of members, the view of the Lok Sabha is likely to prevail in such a meeting.
2. Lok Sabha exercises more powers in money matters. Once the Lok Sabha passes the budget of the government or any other money related law, the Rajya Sabha cannot reject it. The Rajya Sabha can only delay it by 14 days or suggest changes in it. The Lok Sabha may or may not accept these changes.
3. Most importantly, the Lok Sabha controls the Council of Ministers. Only a person who enjoys the support of the majority of the members in the Lok Sabha is appointed the Prime Minister. If the majority of the Lok Sabha members say they have 'no confidence' in the Council of Ministers, all ministers including the Prime Minister, have to quit. The Rajya Sabha does not have this power.

### A day in the life of the Lok Sabha

7 December 2004 was an ordinary day in the life of the Fourteenth Lok Sabha. Let us take a look at what happened in the course of that day. Identify the role and powers of the parliament on the basis of the proceedings for the day as given below. You can also enact this day in your classroom.

**11:00** Various ministries gave written answers to about 250 questions that were asked by members. These included:

- What is the government's policy on talking to militant groups in Kashmir?
- What are the figures of atrocities against Scheduled Tribes, including those inflicted by the police?
- What is the government doing about over-pricing of medicines by big companies?

**12:00** A large number of official documents were presented and were available for discussion. These included:

- Recruitment rules for the Indo-Tibetan Border Police Force
- Annual Report of the Indian Institute of Technology, Kharagpur
- Report and accounts of Rashtriya Ispat Nigam Limited, Visakhapatnam

**12:02** The Minister of Development of North Eastern Region made a statement regarding Revitalisation of the North Eastern Council.

The Minister of State for Railways presented a statement showing the grant needed by the Railways in addition to that sanctioned in the Railway Budget. The Minister of Human Resource Development introduced the National Commission for Minority Educational Institutions Bill, 2004. He also gave a statement explaining why the government had to bring an ordinance for this.

**12:14** Several members highlighted some issues, including:

- The vindictiveness of the Central Bureau of Investigation (CBI) in registering cases against some leaders in the Tehelka case.
- Need to include Rajasthani as an official language in the Constitution.
- Need to renew the insurance policies of farmers and agricultural workers of Andhra Pradesh.

**2:26** Two bills proposed by the government were considered and passed. These were:

- The Securities Laws (Amendment) Bill
- The Enforcement of Security Interest and Recovery of Debts Laws (Amendment) Bill

**4:00** Finally, there was a long discussion regarding the foreign policy of the government and the need to continue an independent foreign policy in the context of the situation in Iraq.

**7:17** Discussion concluded. House adjourned for next day.

### Political Executive

At different levels of any government we find functionaries who take day-to-day decisions but do not exercise supreme power on behalf of the people. All those functionaries are collectively known as the executive. They are called executive because they are in charge of the 'execution' of the policies of the government. This include Prime Minister, cabinet ministers and other ministers. Thus, when we talk about 'the government' we usually mean the executive.

### Political and Permanent Executive

In a democratic country, two categories make up the

executive. One that is elected by the people for a specific period, is called the political executive. Political leaders who take the big decisions fall in this category. In the second category, people are appointed on a long-term basis. This is called the permanent executive or civil services. Persons working in civil services are called civil servants. They remain in office even when the ruling party changes. These officers work under political executive and assist them in carrying out the day-to-day administration. Can you recall the role of political and non-political executive in the case of the Office Memorandum?

You might ask: Why does the political executive have more power than the non-political executive? Why is the minister more powerful than the civil servant? The civil servant is usually more educated and has more expert knowledge of the subject. The advisors working in the Finance Ministry know more about economics than the Finance Minister. Sometimes the ministers may know very little about the technical matters that come under their ministry. This could easily happen in ministries like Defence, Industry, Health, Science and Technology, Mining, etc. Why should the minister have the final say on these matters?

The reason is very simple. In a democracy the will of the people is supreme. The minister is elected by the people and thus empowered to exercise the will of the people on their behalf. She is finally answerable to the people for all the consequences of her decision. That is why the minister takes all the final decisions. The minister decides the overall framework and objectives in which decisions on policy should be made. The minister is not, and is not expected to be, an expert in the matters of her ministry. The minister takes the advice of experts on all technical matters. But very often experts hold different opinions or place before her more than one option. Depending on what the overall objective is, the minister decides.

Actually this happens in any large organisation. Those who understand the overall picture take the most important decisions, not the experts. The experts can tell the route, but someone with a larger view decides the destination. In a democracy elected ministers perform this role.

### Prime Minister and Council of Ministers

Prime Minister is the most important political institution in the country. Yet there is no direct election to the post of the Prime Minister. The President appoints the Prime Minister. But the President cannot appoint anyone she likes. The President appoints the leader of the majority party or the coalition of parties that commands a majority in the Lok Sabha, as Prime Minister. In case no single party or alliance gets a majority, the President appoints the person most likely to secure a majority support. The Prime Minister does not have a fixed tenure. He continues in power so long as he remains the leader of the majority party or coalition.

After the appointment of the Prime Minister, the President appoints other ministers on the advice of the Prime Minister. The Ministers are usually from the party or the coalition that has the majority in the Lok Sabha. The Prime Minister is free to choose ministers, as long as they are members of Parliament. Sometimes, a person who is not a member of Parliament can also become a minister. But such a person has to get elected to one of the Houses of the Parliament within six months of appointment as minister.

Council of Ministers is the official name for the body that includes all the Ministers. It usually has 60 to 80

Ministers of different ranks.

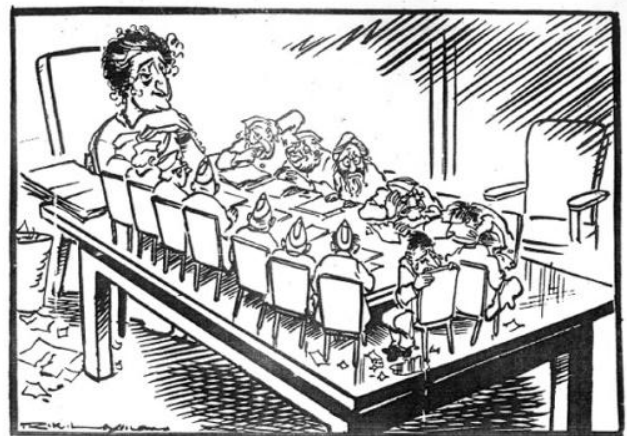
- **Cabinet Ministers** are usually top-level leaders of the ruling party or parties who are in charge of the major ministries. Usually the Cabinet Ministers meet to take decisions in the name of the Council of Ministers. Cabinet is thus the inner ring of the Council of Ministers. It comprises about 20 ministers.

- **Ministers of State with independent charge** are usually in-charge of smaller Ministries. They participate in the Cabinet meetings only when specially invited.

- **Ministers of State** are attached to and required to assist Cabinet Ministers.

Since it is not practical for all ministers to meet regularly and discuss everything, the decisions are taken in Cabinet meetings. That is why parliamentary democracy in most countries is often known as the Cabinet form of government. The Cabinet works as a team. The ministers may have different views and opinions, but everyone has to own up to every decision of the Cabinet.

No minister can openly criticise any decision of the government, even if it is about another Ministry or Department. Every ministry has secretaries, who are civil servants. The secretaries provide the necessary background information to the ministers to take decisions. The Cabinet as a team is assisted by the Cabinet Secretariat. This includes many senior civil servants who try to coordinate the working of different ministries.



*This cartoon depicts a cabinet meeting chaired by Prime Minister Indira Gandhi in early 1970s, at the peak of her popularity. Do you think similar cartoons could be drawn about other prime ministers who followed her?*

### Powers of the Prime Minister

The Constitution does not say very much about the powers of the Prime Minister or the ministers or their relationship with each other. But as head of the government, the Prime Minister has wide ranging powers. He chairs Cabinet meetings. He coordinates the work of different Departments. His decisions are final in case disagreements arise between Departments. He exercises general supervision of different ministries. All ministers work under his leadership. The Prime Minister distributes and redistributes work to the ministers. He also has the power to dismiss ministers. When the Prime Minister quits, the entire ministry quits.

### Read the cartoon

Thus, if the Cabinet is the most powerful institution in India, within the Cabinet it is the Prime Minister who is the most powerful. The powers of the Prime Minister in all parliamentary democracies of the world have increased so much in recent decades that parliamentary



democracies are some times seen as Prime Ministerial form of government. As political parties have come to play a major role in politics, the Prime Minister controls the Cabinet and Parliament through the party. The media also contributes to this trend by making politics and elections as a competition between top leaders of parties. In India too we have seen such a tendency towards the concentration of powers in the hands of the Prime Minister. Jawaharlal Nehru, the first Prime Minister of India, exercised enormous authority because he had great influence over the public. Indira Gandhi was also a very powerful leader compared to her colleagues in the Cabinet. Of course, the extent of power wielded by a Prime Minister also depends on the personality of the person holding that position. However, in recent years the rise of coalition politics has imposed certain constraints on the power of the Prime Minister. The Prime Minister of a coalition government cannot take decisions as he likes. He has to accommodate different groups and factions in his party as well as among alliance partners. He also has to heed to the views and positions of the coalition partners and other parties, on whose support the survival of the government depends.

### The President

While the Prime Minister is the head of the government, the President is the head of the State. In our political system the head of the State exercises only nominal powers. The President of India is like the Queen of Britain whose functions are to a large extent ceremonial. The President supervises the overall functioning of all the political institutions in the country so that they operate in harmony to achieve the objectives of the State.

The President is not elected directly by the people. The elected Members of Parliament (MPs) and the elected Members of the Legislative Assemblies (MLAs) elect her. A candidate standing for President's post has to get a majority of votes to win the election. This ensures that the President can be seen to represent the entire nation. At the same time the President can never claim the kind of direct popular mandate that the Prime Minister can. This ensures that she remains only a nominal executive. The same is true of the powers of the President. If you casually read the Constitution you would think that there is nothing that she cannot do. All governmental activities take place in the name of the President. All laws and major policy decisions of the government are issued in her name. All major appointments are made in the name of the President. These include the appointment of the Chief Justice of India, the Judges of the Supreme Court and the High Courts of the states, the Governors of the states, the Election Commissioners, ambassadors to other countries, etc. All international treaties and agreements are made in the name of the President. The President is the supreme commander of the defence forces of India. But we should remember that the President exercises all these powers only on the advice of the Council of Ministers. The President can ask the Council of Ministers to reconsider its advice. But if the same advice is given again, she is bound to act according to it. Similarly, a bill passed by the Parliament becomes a law only after the President gives assent to it. If the President wants, she can delay this for some time and send the bill back to the Parliament for reconsideration. But if the Parliament passes the bill again, she has to sign it.

So you may wonder what does the President really do?

Can she do anything on her own at all? There is one very important thing she should do on her own: appoint the Prime Minister. When a party or coalition of parties secures a clear majority in the elections, the President, has to appoint the leader of the majority party or the coalition that enjoys majority support in the Lok Sabha. When no party or coalition gets a majority in the Lok Sabha, the President exercises her discretion. The President appoints a leader who in her opinion can muster majority support in the Lok Sabha. In such a case, the President can ask the newly appointed Prime Minister to prove majority support in the Lok Sabha within a specified time.

*What is better for a democracy: A Prime Minister who can do whatever he wishes or a Prime Minister who needs to consult other leaders and parties?*

### The Presidential System

Presidents all over the world are not always nominal executives like the President of India. In many countries of the world, the President is both the head of the state and the head of the government. The President of the United States of America is the most well known example of this kind of President. The US President is directly elected by the people. He personally chooses and appoints all Ministers. The law making is still done by the legislature (called the Congress in the US), but the president can veto any law. Most importantly, the president does not need the support of the majority of members in the Congress and neither is he answerable to them. He has a fixed tenure of four years and completes it even if his party does not have a majority in the Congress.

This model is followed in most of the countries of Latin America and many of the ex-Soviet Union countries. Given the centrality of the President, this system of government is called the Presidential form of government. In countries like ours that follow the British model, the parliament is supreme. Therefore our system is called the parliamentary system of government.

### The Judiciary

All the courts at different levels in a country put together are called the judiciary. The Indian judiciary consists of a Supreme Court for the entire nation, High Courts in the states, District Courts and the courts at local level.

India has an integrated judiciary. It means the Supreme Court controls the judicial administration in the country. Its decisions are binding on all other courts of the country. It can take up any dispute

- Between citizens of the country;
- Between citizens and government;
- Between two or more state governments; and
- Between governments at the union and state level.

It is the highest court of appeal in civil and criminal cases. It can hear appeals against the decisions of the High Courts.

Independence of the judiciary means that it is not under the control of the legislature or the executive. The judges do not act on the direction of the government or according to the wishes of the party in power. That is why all modern democracies have courts that are independent of the legislature and the executive. India has achieved this. The judges of the Supreme Court and the High Courts are appointed by the President on the advice of the Prime Minister and in consultation with the Chief Justice of the Supreme Court. In practice it now means that the senior judges of the Supreme Court select the new judges of the Supreme Court and the High Courts. There is very little scope for interference

by the political executive. The senior most judge of the Supreme Court is usually appointed the Chief Justice. Once a person is appointed as judge of the Supreme Court or the High Court it is nearly impossible to remove him or her from that position. It is as difficult as removing the President of India. A judge can be removed only by an impeachment motion passed separately by two-thirds members of the two Houses of the Parliament. It has never happened in the history of Indian democracy.

The judiciary in India is also one of the most powerful in the world. The Supreme Court and the High Courts have the power to interpret the Constitution of the country. They can declare invalid any law of the legislature or the actions of the executive, whether at the Union level or at the state level, if they find such a law or action is against the Constitution. Thus they can determine the Constitutional validity of any legislation or action of the executive in the country, when it is challenged before them. This is known as the judicial review. The Supreme Court of India has also ruled that the core or basic principles of the Constitution cannot be changed by the Parliament.

The powers and the independence of the Indian judiciary allow it to act as the guardian of the Fundamental Rights. We shall see in the next chapter that the citizens have a right to approach the courts to seek remedy in case of any violation of their rights. In recent years the Courts have given several judgments and directives to protect public interest and human rights. Any one can approach the courts if public interest is hurt by the actions of government. This is called public interest litigation. The courts intervene to prevent the misuse of the government's power to make decisions. They check malpractices on the part of public officials. That is why the judiciary enjoys a high level of confidence among the people.

**Important Terms** **Legislature:** The legislature makes the laws. It consists of an assembly of the people's representatives with the power to enact laws for a country. **Executive:** An executive is a group of people with the authority to initiate major policies, make decisions and implement them on the basis of constitutional laws. **Political institutions:** A set of procedures for regulating the conduct of government and political life in the country. **Office memorandum:** A communication issued by an appropriate authority stating the policy or decision of the government. **Reservations:** A policy that declares some positions in government employment and educational institutions 'reserved' for people and communities who have been discriminated against, are disadvantaged and backward. **Judiciary:** The judiciary is an institution that administers justice and resolves legal disputes. **Speaker:** He is the presiding officer of the Lok Sabha and is responsible for the efficient conduct of business in the Lok Sabha. **Question Hour:** During a parliamentary session, a time is fixed for asking questions and answering them only. **Prorogue:** To discontinue a meeting of Parliament for a time without dissolving it. **Adjourn:** To terminate the sitting of the House which meets again at the time appointed for the next sitting. **Ordinance:** Temporary law promulgated by the President of India on the recommendations of the Union Cabinet. It can only be issued when the Parliament is not in session. It has to be approved by the Parliament within six weeks of its first sitting otherwise the ordinance would be considered null and void. **Money Bills:** Bills dealing with money matters like taxes, income, expenditure and grants. **Political executive:** The political executive consists of political leaders who are elected by the people for a specific term. **Permanent executive:** The permanent executive includes members who are appointed on a long-term basis. The permanent executive is also called the civil services. **Council of ministers:** A body of ministers who are collectively responsible to the Lok Sabha. **Cabinet:** A body of senior ministers who controls important

ministers. **Collective responsibility:** For any decision or action of the Cabinet, the Council of Ministers is collectively responsible. If any cabinet decisions is not approved by the Parliament, the entire Council of Ministers has to resign. **Emergency:** Extraordinary or abnormal situation in a country. **Cabinet Secretariat:** The Cabinet as a team is assisted by the Cabinet Secretariat. This includes many senior civil servants who try to coordinate the working of different ministries. **Public Interest Litigation:** Anyone can approach the court if public interest and human rights are affected by the actions of the government. This is called a Public Interest Litigation. **Impeachment:** A special parliamentary procedure to prosecute or to remove the President and other judges for the violation of the constitution.

## Chapter 6 Democratic Rights

### Overview

In the previous two chapters we have looked at two major elements of a democratic government. In Chapter Four we saw how a democratic government has to be periodically elected by the people in a free and fair manner. In Chapter Five we learnt that a democracy must be based on institutions that follow certain rules and procedures. These elements are necessary but not sufficient for a democracy. Elections and institutions need to be combined with a third element – enjoyment of rights – to make a government democratic. Even the most properly elected rulers working through the established institutional process must learn not to cross some limits. Citizens' democratic rights set those limits in a democracy.

In this chapter we will discuss the meaning of rights and why do we need them. As in the previous chapters, the general discussion is followed by a focus on India. We discuss one by one the Fundamental Rights in the Indian Constitution. Then we turn to how these rights can be used by ordinary citizens. Who will protect and enforce them? Finally we take a look at how the scope of rights has been expanding.

### Rights in a democracy

#### What are rights?

Rights are claims of a person over other fellow beings, over the society and over the government. All of us want to live happily, without fear and without being subjected to degraded treatment. For this we expect others to behave in such a way that does not harm us or hurt us. Equally, our actions should not also harm or hurt others. So a right is possible when you make a claim that is equally possible for others. You cannot have a right that harms or hurts others. You cannot have a right to play a game in such a way that it breaks the neighbour's window. The Serbs in Yugoslavia could not have claimed the whole country for themselves. The claims we make should be reasonable. They should be such that can be made available to others in an equal measure. Thus, a right comes with an obligation to respect other rights.

Just because we claim some thing it does not become our right. It has to be recognised by the society we live in. Rights acquire meaning only in society. Every society makes certain rules to regulate our conduct. They tell us what is right and what is wrong. What is recognised by the society as rightful becomes the basis of rights. That is why the notion of rights changes from time to time and society to society. Two hundred years ago anyone who said that women should have right to vote would have sounded strange. Today not granting them vote in

Saudi Arabia appears strange.

When the socially recognised claims are written into law they acquire real force. Otherwise they remain merely as natural or moral rights. The prisoners in Guantanamo Bay had a moral claim not to be tortured or humiliated. But they could not go to anyone to enforce this claim. When law recognises some claims they become enforceable. We can then demand their application. When fellow citizens or the government do not respect these rights we call it violation or infringement of our rights. In such circumstances citizens can approach courts to protect their rights. So, if we want to call any claim a right, it has to have these three qualities. **Rights are reasonable claims of persons recognised by society and sanctioned by law.**

### Why do we need rights in a democracy?

Rights are necessary for the very sustenance of a democracy. In a democracy every citizen has to have the right to vote and the right to be elected to government. For democratic elections to take place, it is necessary that citizens should have the right to express their opinion, form political parties and take part in political activities.

Rights also perform a very special role in a democracy. Rights protect minorities from the oppression of majority. They ensure that the majority cannot do whatever it likes. Rights are guarantees which can be used when things go wrong. Things may go wrong when some citizens may wish to take away the rights of others. This usually happens when those in majority want to dominate those in minority. The government should protect the citizens' rights in such a situation. But sometimes elected governments may not protect or may even attack the rights of their own citizens. That is why some rights need to be placed higher than the government, so that the government cannot violate them. In most democracies the basic rights of the citizen are written down in the constitution.

### Rights in the Indian Constitution

In India, like most other democracies in the world, these rights are mentioned in the Constitution. Some rights which are fundamental to our life are given a special status. They are called Fundamental Rights. We have already read in Chapter Three the preamble to our Constitution. It talks about securing for all its citizens equality, liberty and justice. Fundamental Rights put this promise into effect. They are an important basic feature of India's Constitution.

Everyone knows that the rich can have better lawyers in the courts. What is the point in talking about equality before law?

You already know our Constitution provides for six Fundamental Rights. Can you recall these? What exactly do these rights mean for an ordinary citizen? Let us look at these one by one.

### Right to Equality

The Constitution says that the government shall not deny to any person in India equality before the law or the equal protection of the laws. It means that the laws apply in the same manner to all, regardless of a person's status. This is called the rule of law. Rule of law is the foundation of any democracy. It means that no person is above the law. There cannot be any distinction between a political leader, government official and an ordinary citizen.

Every citizen, from the Prime Minister to a small farmer in a remote village, is subjected to the same laws. No person can legally claim any special treatment or

privilege just because he or she happens to be an important person. For example, a few years ago a former Prime Minister of the country faced a court case on charges of cheating. The court finally declared that he was not guilty. But as long as the case continued, he had to go to the court, give evidence and file papers, just like any other citizen.

This basic position is further clarified in the Constitution by spelling out some implications of the Right to Equality. The government shall not discriminate against any citizen on grounds only of religion, race, caste, sex or place of birth. Every citizen shall have access to public places like shops, restaurants, hotels, and cinema halls. Similarly, there shall be no restriction with regard to the use of wells, tanks, bathing ghats, roads, playgrounds and places of public resorts maintained by government or dedicated to the use of general public. This might appear very obvious, but it was necessary to incorporate these rights in the Constitution of our country where the traditional caste system did not allow people from some communities to access all public places.

The same principle applies to public jobs. All citizens have equality of opportunity in matters relating to employment or appointment to any position in the government. No citizen shall be discriminated against or made ineligible for employment on the grounds mentioned above. You have read in Chapter Five that the Government of India has provided reservations for Scheduled Castes, Scheduled Tribes and Other Backward Classes. Various governments have different schemes for giving preference to women, poor or physically handicapped in some kinds of jobs. Are these reservations against the right to equality? They are not. For equality does not mean giving everyone the same treatment, no matter what they need. Equality means giving everyone an equal opportunity to achieve whatever one is capable of. Sometimes it is necessary to give special treatment to someone in order to ensure equal opportunity. This is what job reservations do. Just to clarify this, the Constitution says that reservations of this kind are not a violation of the Right to Equality. The principle of non-discrimination extends to social life as well. The Constitution mentions one extreme form of social discrimination, the practice of untouchability, and clearly directs the government to put an end to it. The practice of untouchability has been forbidden in any form. Untouchability here does not only mean refusal to touch people belonging to certain castes. It refers to any belief or social practice which looks down upon people on account of their birth with certain caste labels. Such practice denies them interaction with others or access to public places as equal citizens. So the Constitution made untouchability a punishable offence.

### Many Forms of Untouchability

In 1999, P. Sainath wrote a series of newsreports in *The Hindu* describing untouchability and caste discrimination that was still being practiced against Dalits or persons belonging to Scheduled Castes. He travelled to various parts of the country and found that in many places:

- Tea stalls kept two kinds of cups, one for Dalits one for others;
- Barbers refused to serve dalit clients;
- Dalit students were made to sit separately in the classroom or drink water from separate pitcher;
- Dalit grooms were not allowed to ride a horse in the wedding procession; and



• Dalits were not allowed to use common handpump or if they did, the handpump was washed to purify it. All these fall under the definition of untouchability. Can you think of some examples from your own area?

### Right to Freedom

Freedom means absence of constraints. In practical life it means absence of interference in our affairs by others – be it other individuals or the government. We want to live in society, but we want to be free. We want to do things in the way we want to do them. Others should not dictate us what we should do. So, under the Indian Constitution all citizens have the right to

- Freedom of speech and expression
- Assembly in a peaceful manner
- Form associations and unions
- Move freely throughout the country
- Reside in any part of the country, and
- Practice any profession, or to carry on any occupation, trade or business.

*Should the freedom of expression be extended to those who are spreading wrong and narrow-minded ideas? Should they be allowed to confuse the public?*

You should remember that every citizen has the right to all these freedoms. That means you cannot exercise your freedom in such a manner that violates others' right to freedom. Your freedoms should not cause public nuisance or disorder. You are free to do everything which injures no one else. Freedom is not unlimited license to do what one wants. Accordingly, the government can impose certain reasonable restrictions on our freedoms in the larger interests of the society. **Freedom of speech and expression** is one of the essential features of any democracy. Our ideas and personality develop only when we are able to freely communicate with others. You may think differently from others. Even if a hundred people think in one way, you should have the freedom to think differently and express your views accordingly. You may disagree with a policy of government or activities of an association. You are free to criticise the government or the activities of the association in your conversations with parents, friends and relatives. You may publicise your views through a pamphlet, magazine or newspaper. You can do it through paintings, poetry or songs. However, you cannot use this freedom to instigate violence against others. You cannot use it to incite people to rebel against government. Neither can you use it to defame others by saying false and mean things that cause damage to a person's reputation.

**Citizens have the freedom to hold meetings, processions, rallies and demonstrations on any issue.** They may want to discuss a problem, exchange ideas, mobilise public support to a cause, or seek votes for a candidate or party in an election. But such meetings have to be peaceful. They should not lead to public disorder or breach of peace in society. Those who participate in these activities and meetings should not carry weapons with them. Citizens also can form associations. For example workers in a factory can form a workers' union to promote their interests. Some people in a town may come together to form an association to campaign against corruption or pollution. As citizens we have the **freedom to travel to any part of the country**. We are free to reside and settle in any part of the territory of India. Let us say a person who belongs to the state of Assam wants to start a business in Hyderabad. He may not have any connection with that city, he may not have even seen it ever. Yet as a citizen of India he has the right to set up base there. This right

allows lakhs of people to migrate from villages to towns and from poorer regions of the countries to prosperous regions and big cities. The same freedom extends to choice of occupations. No one can force you to do or not to do a certain job. Women cannot be told that some kinds of occupations are not for them. People from deprived castes cannot be kept to their traditional occupations.

The Constitution says that no person can be deprived of his **life or personal liberty** except according to procedure established by law. It means that no person can be killed unless the court has ordered a death sentence. It also means that a government or police officer can arrest or detain any citizen unless he has proper legal justification. Even when they do, they have to follow some procedures:

- A person who is arrested and detained in custody will have to be informed of the reasons for such arrest and detention.
- A person who is arrested and detained shall be produced before the nearest magistrate within a period of 24 hours of arrest.
- Such a person has the right to consult a lawyer or engage a lawyer for his defence.

### Right against Exploitation

Once the right to liberty and equality is granted, it follows that every citizen has a right not to be exploited. Yet the Constitution makers thought it was necessary to write down certain clear provisions to prevent exploitation of the weaker sections of the society. The Constitution mentions three specific evils and declares these illegal. First, the Constitution prohibits 'traffic in human beings'. Traffic here means selling and buying of human beings, usually women, for immoral purposes. Second, our Constitution also prohibits forced labour or begar in any form. Begar is a practice where the worker is forced to render service to the 'master' free of charge or at a nominal remuneration. When this practice takes place on a life-long basis, it is called the practice of bonded labour. Finally, the Constitution also prohibits child labour. No one can employ a child below the age of fourteen to work in any factory or mine or in any other hazardous work, such as railways and ports. Using this as a basis many laws have been made to prohibit children from working in industries such as beedi making, firecrackers and matches, printing and dyeing.

### Right to Freedom of Religion

Right to freedom includes right to freedom of religion as well. In this case too, the Constitution makers were very particular to state it clearly. You have already read in Chapter Three that India is a secular state. Most people in India, like anywhere else in the world, follow different religions. Some may not believe in any religion. Secularism is based on the idea that the state is concerned only with relations among human beings, and not with the relation between human beings and God. A secular state is one that does not establish any one religion as official religion. Indian secularism practices an attitude of a principled and equal distance from all religions. The state has to be neutral and impartial in dealing with all religions.

Every person has a **right to profess, practice and propagate the religion** he or she believes in. Every religious group or sect is free to manage its religious affairs. A right to propagate one's religion, however, does not mean that a person has right to compel another person to convert into his religion by means of force, fraud, inducement or allurement. Of course, a person is

free to change religion on his or her own will. Freedom to practice religion does not mean that a person can do whatever he wants in the name of religion. For example, one cannot sacrifice animals or human beings as offerings to supernatural forces or gods. Religious practices which treat women as inferior or those that infringe women's freedom are not allowed. For example, one cannot force a widowed woman to shave head or wear white clothes.

A secular state is one that does not confer any privilege or favour on any particular religion. Nor does it punish or discriminate against people on the basis of religion they follow. Thus the government cannot compel any person to pay any taxes for the promotion or maintenance of any particular religion or religious institution. There shall be no religious instruction in the government educational institutions. In educational institutions managed by private bodies no person shall be compelled to take part in any religious instruction or to attend any religious worship.

*The Constitution does not give people their religion. Then how can it give people the right to practise their religion?*

### Cultural and Educational Rights

You might wonder why were the Constitution makers were so particular in providing written guarantees of the rights of the minorities. Why are there no special guarantees for the majority? Well, for the simple reason that the working of democracy gives power to the majority. It is the language, culture and religion of minorities that needs special protection. Otherwise, they may get neglected or undermined under the impact of the language, religion and culture of the majority. That is why the Constitution specifies the cultural and educational rights of the minorities:

- Any section of citizens with a distinct language or culture have a right to conserve it.
- Admission to any educational institution maintained by government or receiving government aid cannot be denied to any citizen on the ground of religion or language.
- All minorities have the right to establish and administer educational institutions of their choice.

Here minority does not mean only religious minority at the national level. In some places people speaking a particular language are in majority; people speaking a different language are in a minority. For example, Telugu speaking people form a majority in Andhra Pradesh. But they are a minority in the neighbouring State of Karnataka. Sikhs constitute a majority in Punjab. But they are a minority in Rajasthan, Haryana and Delhi.

### How can we secure these rights?

If rights are like guarantees, they are of no use if there is no one to honour them. The fundamental rights in the Constitution are important because they are enforceable. We have a right to seek the enforcement of the above mentioned rights. This is called the Right to Constitutional Remedies. This itself is a Fundamental Right. This right makes other rights effective. It is possible that sometimes our rights may be violated by fellow citizens, private bodies or by the government. When any of our rights are violated we can seek remedy through courts. If it is a Fundamental Right we can directly approach the Supreme Court or the High Court of a state. That is why Dr. Ambedkar called the Right to Constitutional Remedies, 'the heart and soul' of our Constitution.

### Can the President of India stop you from approaching the Supreme Court to secure your fundamental rights?

Fundamental Rights are guaranteed against the actions of the Legislatures, the Executive, and any other authorities instituted by the government. There can be no law or action that violates the Fundamental Rights. If any act of the Legislature or the Executive takes away or limits any of the Fundamental Rights it will be invalid. We can challenge such laws of the central and state governments, the policies and actions of the government or the governmental organisations like the nationalised banks or electricity boards. Courts also enforce the Fundamental Rights against private individuals and bodies. The Supreme Court and High Courts have the power to issue directions, orders or writs for the enforcement of the Fundamental Rights. They can also award compensation to the victims and punishment to the violators. We have already seen in Chapter Five that the judiciary in our country is independent of the government and the parliament. We also noted that our judiciary is very powerful and can do whatever is needed to protect the rights of the citizens.

### National Human Rights Commission

Do you notice references to the National Human Rights Commission (NHRC) in the news collage on this page?

These references reflect the growing awareness of human rights and struggles for human dignity. Many cases of human rights violations in diverse fields, for instance, Gujarat riots, are being brought to the public notice from across India. Human rights organisations and the media often criticise government agencies for not seriously pursuing these cases or catching the culprits.

Someone had to intervene on behalf of the victims. This is where the National Human Rights Commission stepped in. This is an independent commission set up by law in 1993. Like judiciary, the Commission is independent of the government. The Commission is appointed by the President and includes retired judges, officers and eminent citizens. Yet it does not have the burden of deciding court cases. So it can focus on helping the victims secure their human rights. These include all the rights granted to the citizens by the Constitution. For NHRC human rights also include the rights mentioned in the UN sponsored international treaties that India has signed.

The NHRC cannot by itself punish the guilty. That is the responsibility of courts. The NHRC is there to make independent and credible inquiry into any case of violation of human rights. It also inquires into any case of abetment of such violation or negligence in controlling it by any government officer and takes other general steps to promote human rights in the country.

The Commission presents its findings and recommendations to the government or intervene in the court on behalf of the victims. It has wide ranging powers to carry out its inquiry. Like any court it can summon witnesses, question any government official, demand any official paper, visit any prison for inspection or send its own team for on-the-spot inquiry. Any citizen of India can write a letter to this address to complain against the violation of human rights: National Human Rights Commission, Faridkot House, Copernicus Marg, New Delhi 110001. There is no fee or any formal procedure to approach the NHRC. Like NHRC, there are State Human Rights Commissions in 23 states of the country (as on 1

September 2013).

In case of any violation of a Fundamental Right the aggrieved person can go to a court for remedy. But now, any person can go to court against the violation of the Fundamental Right, if it is of social or public interest. It is called Public Interest Litigation (PIL). Under the PIL any citizen or group of citizens can approach the Supreme Court or a High Court for the protection of public interest against a particular law or action of the government. One can write to the judges even on a postcard. The court will take up the matter if the judges find it in public interest.

### Expanding scope of rights

We began this chapter by discussing the significance of rights. In much of the chapter we have focussed only on fundamental rights in the constitution. You might think that fundamental rights granted by the constitution are the only rights citizens have. This is not true. While fundamental rights are the source of all rights, our constitution and law offers a wider range of rights. Over the years the scope of rights has expanded.

*Are these rights only for adults? Which of these rights are available to children?*

Sometimes it leads to expansion in the legal rights that the citizen can enjoy. From time to time, the courts gave judgments to expand the scope of rights. Certain rights like right to freedom of press, right to information, and right to education are derived from the Fundamental Rights. Now school education has become a right for Indian citizens. The governments are responsible for providing free and compulsory education to all children up to the age of 14 years. Parliament has enacted a law giving the right to information to the citizens. This Act was made under the Fundamental Right to freedom of thought and expression. We have a right to seek information from government offices. Recently the Supreme Court has expanded the meaning of the right to life to include the right to food. Also, rights are not limited only to Fundamental Rights as enumerated in the Constitution. Constitution provides many more rights, which may not be Fundamental Rights. For example the right to property is not a Fundamental Right but it is a constitutional right. Right to vote in elections is an important constitutional right.

Sometimes the expansion takes place in what is called human rights. These are universal moral claims that may or may not have been recognised by law. In that sense these claims are not rights going by the definition that we presented earlier. With the expansion of democracy all over the world, there is greater pressure on governments to accept these claims. Some international covenants have also contributed to the expansion of rights.

### International Covenant on Economic, Social and Cultural Rights

This international covenant recognises many rights that are not directly a part of the Fundamental Rights in the Indian Constitution. This has not yet become an international treaty. But human right activists all over the world see this as a standard of human rights. These include:

- right to work: opportunity to everyone to earn livelihood by working
- right to safe and healthy working conditions, fair wages that can provide decent standard of living for the workers and their families
- right to adequate standard of living including adequate food, clothing and housing

- right to social security and insurance
  - right to health: medical care during illness, special care for women during childbirth and prevention of epidemics
  - right to education: free and compulsory primary education, equal access to higher education.
- Thus the scope of rights has been expanding and new rights are evolving over time. They are result of struggle of the people. New rights emerge as societies develop or as new constitutions are made. The Constitution of South Africa guarantees its citizens several kinds of new rights:
- Right to privacy, so that citizens or their home cannot be searched, their phones cannot be tapped, their communication cannot be opened.
  - Right to an environment that is not harmful to their health or well-being;
  - Right to have access to adequate housing.
  - Right to have access to health care services, sufficient food and water; no one may be refused emergency medical treatment.
- Many people think that the right to work, right to health, right to minimum livelihood and right to privacy should be made fundamental rights in India as well. What do you think?

### Glossary

**Amnesty International:** An international organisation of volunteers who campaign for human rights. This organisation brings out independent reports on the violation of human rights all over the world.

**Claim:** Demand for legal or moral entitlements a person makes on fellow citizens, society or the government.

**Covenant:** Promise made by individuals, groups or countries to uphold a rule or principle. It is legally binding on the signatories to the agreement or statement.

**Dalit:** A person who belongs to the castes which were considered low and not touchable by others. Dalits are also known by other names such as the Scheduled Castes, Depressed Classes etc.

**Ethnic group:** An ethnic group is a human population whose members usually identify with each other on the basis of a common ancestry. People of an ethnic group are united by cultural practices, religious beliefs and historical memories.

**Traffic:** Selling and buying of men, women or children for immoral purposes.

**Summon:** An order issued by a court asking a person to appear before it.

**Writ:** A formal document containing an order of the court to the government issued only by High Court or the Supreme Court.

**Important Terms** **Amnesty International:** Amnesty International is an international organization of volunteers who campaign for human rights. This organization brings out independent reports on the violation of human rights all over the world. **Ethnic Group:** An ethnic group is a human population whose members usually identify with each other on the basis of a common ancestry. People of an ethnic group are united by cultural practices, religious beliefs and historical memories. **Dalit:** A person who belongs to the castes which are considered low and not touchable by others. Dalits are also known by other names such as the scheduled castes, deprived classes, etc. **Trafficking:** Selling and buying of men, women or children for immoral purposes. **Summon:** An order issued by a court asking a person to appear before it. **Writ:** A formal document containing an order of the court to the government issued only by the High Court or the Supreme Court. **Covenant:** It is a promise made by individuals, groups or countries to uphold a rule or principle. It is legally binding on the signatories to the agreement or statement.





# NCERT Class 10

## Political Science (Democratic Politics 2)

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 Power-Sharing

##### Belgium and Sri Lanka & Majoritarianism in Sri Lanka

##### Overview

With this chapter, we resume the tour of democracy that we started last year. We noted last year that in a democracy all power does not rest with any one organ of the government. An intelligent sharing of power among legislature, executive and judiciary is very important to the design of a democracy. In this and the next two chapters, we carry this idea of power-sharing forward. We start with two stories from Belgium and Sri Lanka. Both these stories are about how democracies handle demands for power-sharing. The stories yield some general conclusions about the need for power-sharing in democracy. This allows us to discuss various forms of power-sharing that will be taken up in the following two chapters.

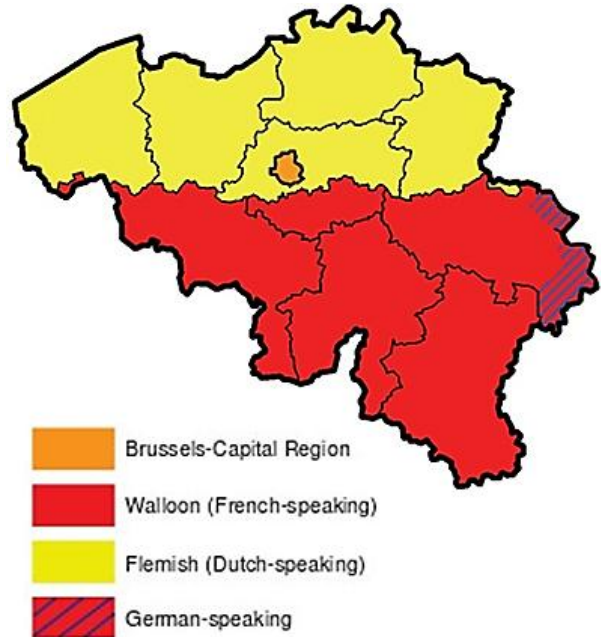
##### Belgium and Sri Lanka

Belgium is a small European country. Brussels is the capital of this country.

- The ethnic composition of Belgium is very complex.
- In Belgium people speak mainly three languages—Dutch (59 percent), French (40 percent) and German (1 percent).
- In Brussels, the Dutch-speaking people are in a minority which is the opposite of the rest of the country, where they are in a majority.

The minority French-speaking community was relatively rich and powerful. This was resented by the Dutch-speaking community who got the benefit of economic development and education much later. This led to tensions between the Dutch-speaking and French-speaking communities during the 1950s and 1960s. The tension between the two communities was more acute in Brussels. Brussels presented a special problem: the Dutch-speaking people constituted a majority in the country, but a minority in the capital.

##### Communities and regions of Belgium



*Look at the maps of Belgium and Sri Lanka. In which region, do you find concentration of different communities?*

Let us compare this to the situation in another country. Sri Lanka is an island country. It has a diverse population.

- In Sri Lanka, 74 percent people speak Sinhala and 18 percent people speak Tamil.
- In Sri Lanka, there are four religions:
  - Buddhism
  - Islam
  - Hinduism
  - Christianity

Just imagine what could happen in situations like this. In Belgium, the Dutch community could take advantage of its numeric majority and force its will on the French and German-speaking population. This would push the conflict among communities further. This could lead to a very messy partition of the country; both the sides would claim control over Brussels. In Sri Lanka, the Sinhala community enjoyed an even bigger majority and could impose its will on the entire country. Now, let us look at what happened in both these countries.

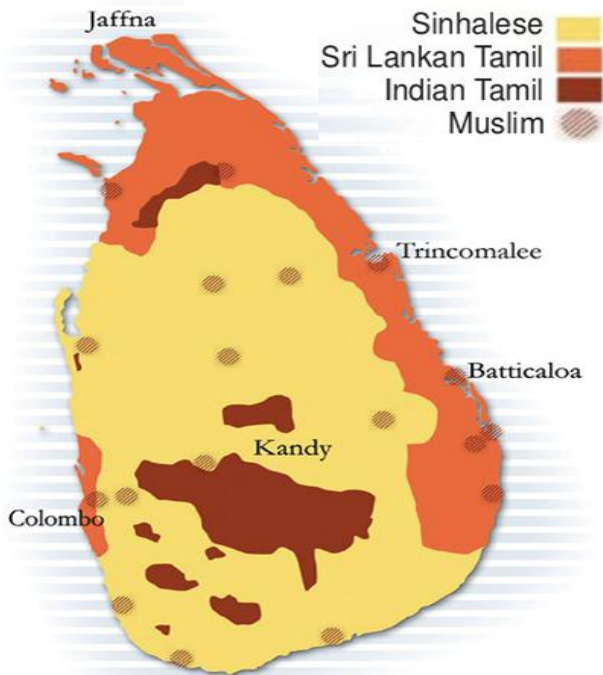
##### Majoritarianism in Sri Lanka

In 1956, an act was passed to recognize Sinhala as the only official language of Sri Lanka, thus disregarding Tamil.

- The leaders of the Sinhala community sought to secure dominance over government by virtue of their majority and thus, the democratically elected government adopted a series of majoritarian measures to establish Sinhala supremacy.
- It followed majoritarianism.

- By 1980s several political organizations were formed demanding an independent Tamil Eelam (state) in northern and eastern parts of Sri Lanka.
- The distrust between the two communities turned into wide spread conflict which resulted into a Civil War.

### Ethnic Communities of Sri Lanka



*What's wrong if the majority community rules? If Sinhalese don't rule in Sri Lanka, where else will they rule?*

### Accommodation in Belgium

The Belgian leaders took a different path. They recognised the existence of regional differences and cultural diversities. Between 1970 and 1993, they amended their constitution four times so as to work out an arrangement that would enable everyone to live together within the same country. The arrangement they worked out is different from any other country and is very innovative. Here are some of the elements of the Belgian model:

Constitution prescribes that the number of Dutch and French-speaking ministers shall be equal in the central government. Some special laws require the support of majority of members from each linguistic group. Thus, no single community can make decisions unilaterally. Many powers of the central government have been given to state governments of the two regions of the country. The state governments are not subordinate to the Central Government.

Brussels has a separate government in which both the communities have equal representation. The French-speaking people accepted equal representation in Brussels because the Dutch-speaking community has accepted equal representation in the Central Government.

Apart from the Central and the State Government, there is a third kind of government. This 'community government' is elected by people belonging to one language community – Dutch, French and German-speaking – no matter where they live. This government has the power regarding cultural, educational and language-related issues.

You might find the Belgian model very complicated. It indeed is very complicated, even for people living in Belgium. But these arrangements have worked well so

far. They helped to avoid civic strife between the two major communities and a possible division of the country on linguistic lines. When many countries of Europe came together to form the European Union, Brussels was chosen as its headquarters.

*So you are saying that sharing of power makes us more powerful. Sounds odd Let me think.*

What do we learn from these two stories of Belgium and Sri Lanka? Both are democracies. Yet, they dealt with the question of power sharing differently. In Belgium, the leaders have realised that the unity of the country is possible only by respecting the feelings and interests of different communities and regions. Such a realisation resulted in mutually acceptable arrangements for sharing power. Sri Lanka shows us a contrasting example. It shows us that if a majority community wants to force its dominance over others and refuses to share power, it can undermine the unity of the country.

### Why power sharing is desirable?

Thus, two different sets of reasons can be given in favour of power sharing. Firstly, power sharing is good because it helps to reduce the possibility of conflict between social groups. Since social conflict often leads to violence and political instability, power sharing is a good way to ensure the stability of political order. Imposing the will of majority community over others may look like an attractive option in the short run, but in the long run it undermines the unity of the nation. Tyranny of the majority is not just oppressive for the minority; it often brings ruin to the majority as well. There is a second, deeper reason why power sharing is good for democracies. Power sharing is the very spirit of democracy. A democratic rule involves sharing power with those affected by its exercise, and who have to live with its effects. People have a right to be consulted on how they are to be governed. A legitimate government is one where citizens, through participation, acquire a stake in the system.

Let us call the first set of reasons PRUDENTIAL and the second moral. While prudential reasons stress that power sharing will bring out better outcomes, moral reasons emphasise the very act of power sharing as valuable.

**Prudential:** Based on prudence, or on careful calculation of gains and losses. Prudential decisions are usually contrasted with decisions based purely on moral considerations.

### Forms of power-sharing

The idea of power-sharing has emerged in opposition to the notions of undivided political power. For a long time it was believed that all power of a government must reside in one person or group of persons located at one place. It was felt that if the power to decide is dispersed, it would not be possible to take quick decisions and to enforce them. But these notions have changed with the emergence of democracy. One basic principle of democracy is that people are the source of all political power. In a democracy, people rule themselves through institutions of self-government. In a good democratic government, due respect is given to diverse groups and views that exist in a society. Everyone has a voice in the shaping of public policies. Therefore, it follows that in a democracy political power should be distributed among as many citizens as possible.

**In modern democracies,** power sharing arrangements can take many forms. Let us look at some of the most common arrangements that we have or will come across.





*In 2005, some new laws were made in Russia giving more powers to its president. During the same time the US president visited Russia. What, according to this cartoon, is the relationship between democracy and concentration of power? Can you think of some other examples to illustrate the point being made here?*

1. Power is shared **among different organs of government**, such as the legislature, executive and judiciary. Let us call this horizontal distribution of power because it allows different organs of government placed at the same level to exercise different powers. Such a separation ensures that none of the organs can exercise unlimited power. Each organ checks the others. This results in a balance of power among various institutions. Last year, we studied that in a democracy, even though ministers and government officials exercise power, they are responsible to the Parliament or State Assemblies. Similarly, although judges are appointed by the executive, they can check the functioning of executive or laws made by the legislatures. This arrangement is called a system of checks and balances.

2. Power can be shared **among governments at different levels** – a general government for the entire country and governments at the provincial or regional level. Such a general government for the entire country is usually called federal government. In India, we refer to it as the Central or Union Government. The governments at the provincial or regional level are called by different names in different countries. In India, we call them State Governments. This system is not followed in all countries. There are many countries where there are no provincial or state governments. But in those countries like ours, where there are different levels of government, the constitution clearly lays down the powers of different levels of government. This is what they did in Belgium, but was refused in Sri Lanka. This is called federal division of power. The same principle can be extended to levels of government lower than the State government, such as the municipality and panchayat. Let us call division of powers involving higher and lower levels of government vertical division of power. We shall study these at some length in the next chapter.

3. Power may also be shared **among different social groups** such as the religious and linguistic groups. 'Community government' in Belgium is a good example of this arrangement. In some countries there are constitutional and legal arrangements whereby socially weaker sections and women are represented in the legislatures and administration. Last year, we studied the system of 'reserved constituencies' in assemblies and the parliament of our country. This type of

arrangement is meant to give space in the government and administration to diverse social groups who otherwise would feel alienated from the government. This method is used to give minority communities a fair share in power. In Unit II, we shall look at various ways of accommodating social diversities.

4. Power sharing arrangements can also be seen in the way **political parties, pressure groups and movements** control or influence those in power. In a democracy, the citizens must have freedom to choose among various contenders for power. In contemporary democracies, this takes the form of competition among different parties. Such competition ensures that power does not remain in one hand. In the long run, power is shared among different political parties that represent different ideologies and social groups. Sometimes this kind of sharing can be direct, when two or more parties form an alliance to contest elections. If their alliance is elected, they form a coalition government and thus share power. In a democracy, we find interest groups such as those of traders, businessmen, industrialists, farmers and industrial workers. They also will have a share in governmental power, either through participation in governmental committees or bringing influence on the decision-making process. In Unit III, we shall study the working of political parties, pressure groups and social movements.

In my school, the class monitor changes every month. Is that what you call a power sharing arrangement?

**Important Terms Democracy:** A system of government by the whole population or all the eligible members of a state, typically through elected representatives. **Majoritarianism:** Under majoritarianism, majority community rules the country in its own way by disregarding the wishes and needs of the minority. **Legislature:** A kind of deliberative assembly with the power to pass, amend and repeal laws. **Federal Government:** A general government for the entire country is usually called federal government. **Community Government:** Community government is an elected body by the people belonging to one language, one culture or any other property no matter where they live. **Civil War:** A civil war is a war which is fought between different groups of people who live in the same country. **Ethnic:** A social division based on shared culture. **Indian Tamils:** The Tamilians whose forefathers came from India as plantation workers during colonial rule and settled in Sri Lanka are called 'Indian Tamils'. **Sri Lankan Tamils:** Tamil natives of Sri Lanka are called 'Sri Lankan Tamils'.

## Chapter 2 Federalism

### Overview

In the previous chapter, we noted that vertical division of power among different levels of government is one of the major forms of power-sharing in modern democracies. In this chapter, we focus on this form of power-sharing. It is most commonly referred to as federalism. We begin by describing federalism in general terms. The rest of the chapter tries to understand the theory and practice of federalism in India. A discussion of the federal constitutional provisions is followed by an analysis of the policies and politics that has strengthened federalism in practice. Towards the end of the chapter, we turn to the local government, a new and third tier of Indian federalism.

### What is federalism?

Let us get back to the contrast between Belgium and Sri Lanka that we saw in the last chapter. You would recall that one of the key changes made in the Constitution of

Belgium was to reduce the power of the Central Government and to give these powers to the regional governments. Regional governments existed in Belgium even earlier. They had their roles and powers. But all these powers were given to these governments and could be withdrawn by the Central Government. The change that took place in 1993 was that the regional governments were given constitutional powers that were no longer dependent on the central government. Thus, Belgium shifted from a unitary to a federal form of government. Sri Lanka continues to be, for all practical purposes, a unitary system where the national government has all the powers. Tamil leaders want Sri Lanka to become a federal system.

*I am confused. What do we call the Indian government? Is it Union, Federal or Central?*

Federalism is a system of government in which the power is divided between a central authority and various constituent units of the country. Usually, a federation has two levels of government. One is the government for the entire country that is usually responsible for a few subjects of common national interest. The others are governments at the level of provinces or states that look after much of the day-to-day administering of their state. Both these levels of governments enjoy their power independent of the other.



Source: Montreal and Kingston, Handbook of Federal Countries: 2002, McGill-Queen's University Press, 2002.

*Though only 25 of the world's 192 countries have federal political systems, their citizens make up 40 per cent of the world's population. Most of the large countries of the world are federations. Can you notice an exception to this rule in this map?*

In this sense, federations are contrasted with unitary governments. Under the unitary system, either there is only one level of government or the sub-units are subordinate to the central government. The central government can pass on orders to the provincial or the local government. But in a federal system, the central government cannot order the state government to do something. State government has powers of its own for which it is not answerable to the central government. Both these governments are separately answerable to the people.

Let us look at some of the key features of federalism:

1. There are two or more levels (or tiers) of government.
2. Different tiers of government govern the same citizens, but each tier has its own jurisdiction in specific matters of legislation, taxation and administration.
3. The jurisdictions of the respective levels or tiers of government are specified in the constitution. So the existence and authority of each tier of government is constitutionally guaranteed.
4. The fundamental provisions of the constitution cannot be unilaterally changed by one level of government. Such changes require the consent of both the levels of government.

5. Courts have the power to interpret the constitution and the powers of different levels of government. The highest court acts as an umpire if disputes arise between different levels of government in the exercise of their respective powers.

6. Sources of revenue for each level of government are clearly specified to ensure its financial autonomy.

7. The federal system thus has dual objectives: to safeguard and promote unity of the country, while at the same time accommodate regional diversity. Therefore, two aspects are crucial for the institutions and practice of federalism. Governments at different levels should agree to some rules of power-sharing. They should also trust that each would abide by its part of the agreement. An ideal federal system has both aspects: mutual trust and agreement to live together.

*If federalism works only in big countries, why did Belgium adopt it?*

The exact balance of power between the central and the state government varies from one federation to another. This balance depends mainly on the historical context in which the federation was formed. There are two kinds of routes through which federations have been formed. The first route involves independent States coming together on their own to form a bigger unit, so that by pooling sovereignty and retaining identity they can increase their security. This type of **'coming together' federations** include the USA, Switzerland and Australia. In this first category of federations, all the constituent States usually have equal power and are strong vis-à-vis the federal government.

The second route is where a large country decides to divide its power between the constituent States and the national government. India, Spain and Belgium are examples of this kind of **'holding together' federations**. In this second category, the central government tends to be more powerful vis-à-vis the States. Very often different constituent units of the federation have unequal powers. Some units are granted special powers.

**Jurisdiction:** The area over which someone has legal authority. The area may be defined in terms of geographical boundaries or in terms of certain kinds of subjects.

We have earlier seen how small countries like Belgium and Sri Lanka face so many problems of managing diversity. What about a vast country like India, with so many languages, religions and regions? What are the power sharing arrangements in our country?

*Isn't that strange? Did our constitution makers not know about federalism? Or did they wish to avoid talking about it?*

Let us begin with the Constitution. India had emerged as an independent nation after a painful and bloody partition. Soon after Independence, several princely states became a part of the country. The Constitution declared India as a Union of States. Although it did not use the word federation, the Indian Union is based on the principles of federalism.

Let us go back to the seven features of federalism mentioned above. We can see that all these features apply to the provisions of the Indian Constitution. The Constitution originally provided for a two-tier system of government, the Union Government or what we call the Central Government, representing the Union of India and the State governments. Later, a third tier of federalism was added in the form of Panchayats and Municipalities. As in any federation, these different tiers enjoy separate jurisdiction. The Constitution clearly

provided a three-fold distribution of legislative powers between the Union Government and the State Governments. Thus, it contains three lists:

**Union List** includes subjects of national importance such as defence of the country, foreign affairs, banking, communications and currency. They are included in this list because we need a uniform policy on these matters throughout the country. The Union Government alone can make laws relating to the subjects mentioned in the Union List.

**State List** contains subjects of State and local importance such as police, trade, commerce, agriculture and irrigation. The State Governments alone can make laws relating to the subjects mentioned in the State List.

**Concurrent List** includes subjects of common interest to both the Union Government as well as the State Governments, such as education, forest, trade unions, marriage, adoption and succession. Both the Union as well as the State Governments can make laws on the subjects mentioned in this list. If their laws conflict with each other, the law made by the Union Government will prevail.

What about subjects that do not fall in any of the three lists? Or subjects like computer software that came up after the constitution was made? According to our constitution, the Union Government has the power to legislate on these 'residuary' subjects.

We noted above that most federations that are formed by 'holding together' do not give equal power to its constituent units. Thus, all States in the Indian Union do not have identical powers. Some States enjoy a special status. Jammu and Kashmir has its own Constitution. Many provisions of the Indian Constitution are not applicable to this State without the approval of the State Assembly. Indians who are not permanent residents of this State cannot buy land or house here. Similar special provisions exist for some other States of India as well. There are some units of the Indian Union which enjoy very little power. These are areas which are too small to become an independent State but which could not be merged with any of the existing States. These areas, like Chandigarh, or Lakshadweep or the capital city of Delhi, are called Union Territories. These territories do not have the powers of a State. The Central Government has special powers in running these areas. *If agriculture and commerce are state subjects, why do we have ministers of agriculture and commerce in the Union cabinet?*

This sharing of power between the Union Government and the State governments is basic to the structure of the Constitution. It is not easy to make changes to this power sharing arrangement. The Parliament cannot on its own change this arrangement. Any change to it has to be first passed by both the Houses of Parliament with at least two-thirds majority. Then it has to be ratified by the legislatures of at least half of the total States. The judiciary plays an important role in overseeing the implementation of constitutional provisions and procedures. In case of any dispute about the division of powers, the High Courts and the Supreme Court make a decision. The Union and State governments have the power to raise resources by levying taxes in order to carry on the government and the responsibilities assigned to each of them.

### How is federalism practised?

Constitutional provisions are necessary for the success of federalism but these are not sufficient. If the federal experiment has succeeded in India, it is not merely because of the clearly laid out constitutional provisions.

The real success of federalism in India can be attributed to the nature of democratic politics in our country. This ensured that the spirit of federalism, respect for diversity and desire for living together became shared ideals in our country. Let us look at some of the major ways in which this happened.

### Linguistic States

The creation of linguistic States was the first and a major test for democratic politics in our country. If you look at the political map of India when it began its journey as a democracy in 1947 and that of 2013, you will be surprised by the extent of the changes. Many old States have vanished and many new States have been created. Areas, boundaries and names of the States have been changed.

In 1947, the boundaries of several old States of India were changed in order to create new States. This was done to ensure that people who spoke the same language lived in the same State. Some States were created not on the basis of language but to recognise differences based on culture, ethnicity or geography. These include States like Nagaland, Uttarakhand and Jharkhand.

When the demand for the formation of States on the basis of language was raised, some national leaders feared that it would lead to the disintegration of the country. The Central Government resisted linguistic States for some time. But the experience has shown that the formation of linguistic States has actually made the country, more united. It has also made administration easier.

*Why Hindi? Why not Bangla or Telugu?*

### Language policy

A second test for Indian federation is the language policy. Our Constitution did not give the status of national language to any one language. Hindi was identified as the official language. But Hindi is the mother tongue of only about 40 per cent of Indians. Therefore, there were many safeguards to protect other languages. Besides Hindi, there are 21 other languages recognised as Scheduled Languages by the Constitution. A candidate in an examination conducted for the Central Government positions may opt to take the examination in any of these languages. States too have their own official languages. Much of the government work takes place in the official language of the concerned State.

Unlike Sri Lanka, the leaders of our country adopted a very cautious attitude in spreading the use of Hindi. According to the Constitution, the use of English for official purposes was to stop in 1965. However, many non-Hindi speaking States demanded that the use of English continue. In Tamil Nadu, this movement took a violent form. The Central Government responded by agreeing to continue the use of English along with Hindi for official purposes. Many critics think that this solution favoured the English-speaking elite. Promotion of Hindi continues to be the official policy of the Government of India. Promotion does not mean that the Central Government can impose Hindi on States where people speak a different language. The flexibility shown by Indian political leaders helped our country avoid the kind of situation that Sri Lanka finds itself in.

### Centre-State relations

Restructuring the Centre-State relations is one more way in which federalism has been strengthened in practice. How the constitutional arrangements for sharing power work in reality depends to a large extent on how the ruling parties and leaders follow these



arrangements. For a long time, the same party ruled both at the Centre and in most of the States. This meant that the State governments did not exercise their rights as autonomous federal units. As and when the ruling party at the State level was different, the parties that ruled at the Centre tried to undermine the power of the States. In those days, the Central Government would often misuse the Constitution to dismiss the State governments that were controlled by rival parties. This undermined the spirit of federalism.

### **The States Plead for More Powers**



### **Perils of Running a Coalition Government**



Here are two cartoons showing the relationship between Centre and States. Should the State go to the Centre with a begging bowl? How can the leader of a coalition keep the partners of government satisfied?

Are you suggesting that regionalism is good for our democracy? Are you serious?

All this changed significantly after 1990. This period saw the rise of regional political parties in many States of the country. This was also the beginning of the era of coalition governments at the Centre. Since no single party got a clear majority in the Lok Sabha, the major national parties had to enter into an alliance with many parties including several regional parties to form a government at the Centre. This led to a new culture of power sharing and respect for the autonomy of State Governments. This trend was supported by a major judgement of the Supreme Court that made it difficult for the Central Government to dismiss state governments in an arbitrary manner. Thus, federal power sharing is more effective today than it was in the early years after the Constitution came into force.

**Coalition government:** A government formed by the coming together of at least two political parties. Usually partners in a coalition form a political alliance and adopt a common programme.

### **Linguistic diversity of India**

How many languages do we have in India? The answer

depends on how one counts it. The latest information that we have is from the Census of India held in 2001. This census recorded more than 1500 distinct languages which people mentioned as their mother tongues. These languages were grouped together under some major languages. For example languages like Bhojpur, Magadhi, Bundelkhandi, Chhattisgarhi, Rajasthani, Bhili and many others were grouped together under 'Hindi'. Even after this grouping, the Census found 114 major languages. Of these 22 languages are now included in the Eighth Schedule of the Indian Constitution and are therefore called 'Scheduled Languages'. Others are called 'non-Scheduled Languages'. In terms of languages, India is perhaps the most diverse country in the world.

A look at the enclosed table makes it clear that no one language is the mother tongue of the majority of our population. The largest language, Hindi, is the mother tongue of only about 41 per cent Indians. If we add to that all those who knew Hindi as their second or third language, the total number was still less than 50 per cent in 2001. As for English, only 0.02 per cent Indians recorded it as their mother tongue. Another 11 per cent knew it as a second or third language.

Read this table carefully, but you need not memorise it. Just do the following:

### **Scheduled Languages of India**

**Language → Proportion of speakers (%)**

Assamese → 1.28 Bengali → 8.11

Bodo → 0.13 **Dogri → 0.22**

Gujarati → 4.48 **Hindi → 41.03**

Kannada → 3.69 Kashmiri → 0.54

Konkani → 0.24 Maithili → 1.18

Malayalam → 3.21 Manipuri → 0.14

Marathi → 6.99 Nepali → 0.28

Oriya → 3.21 Punjabi → 2.83

Santhali → 0.63 Sindhi → 0.25

Tamil → 5.91 Telugu → 7.19

Urdu → 5.01

### **Decentralisation in India**

We noted above that federal governments have two or more tiers of governments. We have so far discussed the two-tiers of government in our country. But a vast country like India cannot be run only through these two-tiers. States in India are as large as independent countries of Europe. In terms of population, Uttar Pradesh is bigger than Russia, Maharashtra is about as big as Germany. Many of these States are internally very diverse. There is thus a need for power sharing within these States. Federal power sharing in India needs another tier of government, below that of the State governments. This is the rationale for decentralisation of power. Thus, resulted a third-tier of government, called local government.

*So, we are like a three-tier coach in a train I always prefer the lower berth*

When power is taken away from Central and State governments and given to local government, it is called decentralisation. The basic idea behind decentralisation is that there are a large number of problems and issues which are best settled at the local level. People have better knowledge of problems in their localities. They also have better ideas on where to spend money and how to manage things more efficiently. Besides, at the local level it is possible for the people to directly participate in decision making. This helps to inculcate a habit of democratic participation. Local government is the best way to realise one important principle of

democracy, namely local self-government.

The need for decentralisation was recognised in our Constitution. Since then, there have been several attempts to decentralise power to the level of villages and towns. Panchayats in villages and municipalities in urban areas were set up in all the States. But these were directly under the control of state governments. Elections to these local governments were not held regularly. Local governments did not have any powers or resources of their own. Thus, there was very little decentralisation in effective terms.

A major step towards decentralisation was taken in 1992. The Constitution was amended to make the third-tier of democracy more powerful and effective. Now it is constitutionally mandatory to hold regular elections to local government bodies.

Seats are reserved in the elected bodies and the executive heads of these institutions for the Scheduled Castes, Scheduled Tribes and Other Backward Classes. At least one-third of all positions are reserved for women.

An independent institution called the State Election Commission has been created in each State to conduct panchayat and municipal elections.

The State governments are required to share some powers and revenue with local government bodies. The nature of sharing varies from State to State.

Rural local government is popularly known by the name panchayati raj. Each village, or a group of villages in some States, has a gram panchayat. This is a council consisting of several ward members, often called panch, and a president or sarpanch. They are directly elected by all the adult population living in that ward or village. It is the decision-making body for the entire village. The panchayat works under the overall supervision of the gram sabha. All the voters in the village are its members. It has to meet at least twice or thrice in a year to approve the annual budget of the gram panchayat and to review the performance of the gram panchayat.

The local government structure goes right up to the district level. A few gram panchayats are grouped together to form what is usually called a panchayat samiti or block or mandal. The members of this representative body are elected by all the panchayat members in that area. All the panchayat samitis or mandals in a district together constitute the zilla (district) parishad. Most members of the zilla parishad are elected. Members of the Lok Sabha and MLAs of that district and some other officials of other district level bodies are also its members. Zilla parishad chairperson is the political head of the zilla parishad. *Prime Minister runs the country. Chief Minister runs the state. Logically, then, the chairperson of Zilla Parishad should run the district. Why does the D.M. or Collector administer the district?*

Similarly, local government bodies exist for urban areas as well. Municipalities are set up in towns. Big cities are constituted into municipal corporations. Both municipalities and municipal corporations are controlled by elected bodies consisting of people's representatives. Municipal chairperson is the political head of the municipality. In a municipal corporation such an officer is called the mayor.

### An experiment in Brazil

A city called Porto Alegre in Brazil has carried out an extraordinary experiment in combining decentralisation with participative democracy. The city has set up a parallel organisation operating alongside the municipal council, enabling local inhabitants to take real decisions

for their city. The nearly 13 lakh people in this city get to participate in making the budget for their own city. The city is divided into many sectors or what we call wards. Each sector has a meeting, like that of the gram sabha, in which anyone living in that area can participate. There are some meetings to discuss issues that affect the entire city. Any citizen of the city can participate in those meetings. The budget of the city is discussed in these meetings. The proposals are put to the municipality that takes a final decision about it.

About 20,000 people participate in this decision making exercise every year. This method has ensured that the money cannot be spent only for the benefit of the colonies where rich people live. Buses now run to the poor colonies and builders cannot evict slum-dwellers without resettling them.

In our own country, a similar experiment has taken place in some areas in Kerala. Ordinary people have participated in making a plan for the development of their locality.

This new system of local government is the largest experiment in democracy conducted anywhere in the world. There are now about 36 lakh elected representatives in the panchayats and municipalities etc., all over the country. This number is bigger than the population of many countries in the world.

Constitutional status for local government has helped to deepen democracy in our country. It has also increased women's representation and voice in our democracy. At the same time, there are many difficulties. While elections are held regularly and enthusiastically, gram sabhas are not held regularly. Most state governments have not transferred significant powers to the local governments. Nor have they given adequate resources. We are thus still a long way from realising the ideal of self-government.

**Important Terms** **Federalism:** Federalism is the mixed or compound mode of government, combining a general government (the central or 'federal' government) with regional governments (provincial, state, cantonal, territorial or other subunit governments) in a single political system. **Jurisdiction:** A jurisdiction is a state or other area in which a particular court and system of laws has authority. **'Coming together' Federation:** It is a federation in which several independent states come together on their own to form a bigger unit, so that by pooling sovereignty and retaining identity, they can increase their security. It includes the USA, Switzerland and Australia. **'Holding together' Federation:** It is a federation in which a large country decides to divide its power between the constituent states and the national government. It includes India, Spain and Belgium. **Residuary Subjects:** Matters which are not included in any of the three lists are known as residuary subjects and the right to make laws on these subjects is called residuary power. The central government (the Parliament) has been given rights to legislate on these subjects. New subjects such as computer software that came up after the constitution was made come under residuary subjects. **Unitary System:** It is a system of government in which either there is only one level of government or the subunits are subordinate to the Central Government. **Autonomy:** A region or territory to govern itself independently. **Linguistic States:** India is a multilingual country where people speak different languages. After independence, some states were created on the basis of the languages people used to speak. These are known as linguistic states. **State Election Commission:** It is a body created in each state to conduct panchayat and municipal elections. **Gram Sabha:** The bodies for the supervision of Gram Panchayats. **Mayor:** The Chairperson of a Municipal Corporation is known as the mayor.



## Chapter 3

### Democracy And Diversity

#### Overview

In the last chapter, we saw how power can be distributed to accommodate linguistic and regional diversities. But language and region are not the only features that give a distinct identity to people. Sometimes, people also identify themselves and relate with others on the basis of their physical appearance, class, religion, gender, caste, tribe, etc. In this chapter, we study how democracy responds to social differences, divisions and inequalities. We begin with an example of public expression of social divisions. We then draw some general lessons about how social differences can take various forms. We then turn to how democratic politics affects and is affected by these social diversities.

#### Differences, similarities, divisions

The athletes in the example above were responding to social divisions and social inequalities. But does that happen only in societies which have racial divisions? In the previous two chapters we have already noted some other forms of social divisions. The examples of Belgium and Sri Lanka show both regional and social divisions. In the case of Belgium we noted that people who live in different regions speak different languages. In Sri Lanka, we noted linguistic as well as religious differences. Thus social diversity can take different forms in different societies.

#### Origins of social differences

These social differences are mostly based on accident of birth. Normally we don't choose to belong to our community. We belong to it simply because we were born into it. We all experience social differences based on accident of birth in our everyday lives. People around us are male or female, they are tall and short, have different kinds of complexions, or have different physical abilities or disabilities. But all kinds of social differences are not based on accident of birth. Some of the differences are based on our choices. For example, some people are atheists. They don't believe in God or any religion. Some people choose to follow a religion other than the one in which they were born. Most of us choose what to study, which occupation to take up and which games or cultural activities to take part in. All these lead to formation of social groups that are based on our choices.

Every social difference does not lead to social division. Social differences divide similar people from one another, but they also unite very different people. People belonging to different social groups share differences and similarities cutting across the boundaries of their groups. In the instance above, Carlos and Smith were similar in one way (both were African-American) and thus different from Norman who was white. But they were also all similar in other ways – they were all athletes who stood against racial discrimination. It is fairly common for people belonging to the same religion to feel that they do not belong to the same community, because their caste or sect is very different. It is also possible for people from different religions to have the same caste and feel close to each other. Rich and poor persons from the same family often do not keep close relations with each other for they feel they are very different. Thus, we all have more than one identity and can belong to more than one social group. We have different identities in different contexts.

#### Overlapping and cross-cutting differences

Social division takes place when some social difference overlaps with other differences. The difference between the Blacks and Whites becomes a social division in the US because the Blacks tend to be poor, homeless and discriminated against. In our country *Dalits* tend to be poor and landless. They often face discrimination and injustice. Situations of this kind produce social divisions, when one kind of social difference becomes more important than the other and people start feeling that they belong to different communities.

If social differences cross cut one another, it is difficult to pit one group of people against the other. It means that groups that share a common interest on one issue are likely to be in different sides on a different issue. Consider the cases of Northern Ireland and the Netherlands. Both are predominantly Christian but divided between Catholics and Protestants. In Northern Ireland, class and religion overlap with each other. If you are Catholic, you are also more likely to be poor, and you may have suffered a history of discrimination. In the Netherlands, class and religion tend to cut across each other. Catholics and Protestants are about equally likely to be poor or rich. The result is that Catholics and Protestants have had conflicts in Northern Ireland, while they do not do so in the Netherlands. Overlapping social differences create possibilities of deep social divisions and tensions. Cross-cutting social differences are easier to accommodate.

Social divisions of one kind or another exist in most countries. It does not matter whether the country is small or big. India is a vast country with many communities. Belgium is a small country with many communities. Even those countries such as Germany and Sweden, that were once highly **homogeneous**, are undergoing rapid change with influx of people from other parts of the world. **Migrants** bring with them their own culture and tend to form a different social community. In this sense most countries of the world are multi-cultural.

**Homogeneous society:** A society that has similar kinds of people, especially where there are no significant ethnic differences.

**Migrant:** Anybody who shifts from one region or country to another region within a country or to another country, usually for work or other economic opportunities.

#### Politics of social divisions

How do these social divisions affect politics? What does politics do to these social divisions? At first sight, it would appear that the combination of politics and social divisions is very dangerous and explosive. Democracy involves competition among various political parties. Their competition tends to divide any society. If they start competing in terms of some existing social divisions, it can make social divisions into political divisions and lead to conflict, violence or even disintegration of a country. This has happened in many countries.

#### Range of outcomes

Take the case of Northern Ireland that we referred to above. This region of the United Kingdom has been for many years the site of a violent and bitter ethno-political conflict. Its population is divided into two major sects of Christianity: 53 per cent are Protestants, while 44 per cent are Roman Catholics. The Catholics were represented by Nationalist parties who demanded that Northern Ireland be unified with the Republic of



Ireland, a predominantly Catholic country. The Protestants were represented by Unionists who wanted to remain with the UK, which is predominantly protestant. Hundreds of civilians, militants and security forces were killed in the fight between Unionists and Nationalists and between the security forces of the UK and the Nationalists. It was only in 1998, that the UK government and the Nationalists reached a peace treaty after which the latter suspended their armed struggle. In Yugoslavia, the story did not have a happy ending. Political competition along religious ending ethnic lines led to the disintegration of Yugoslavia into six independent countries.

At the same time every expression of social divisions in politics does not lead to such disasters. We have already seen that social divisions of one kind or another exist in most countries of the world. Wherever they exist, these divisions are reflected in politics. In a democracy it is only natural that political parties would talk about these divisions, make different promises to different communities, look after due representation of various communities and make policies to redress the grievances of the disadvantaged communities. Social divisions affect voting in most countries. People from one community tend to prefer some party more than others. In many countries there are parties that focus only on one community. Yet all this does not lead to disintegration of the country.

### Three determinants

Three factors are crucial in deciding the outcome of politics of social divisions. First of all, the outcome depends on how people perceive their identities. If people see their identities in singular and exclusive terms, it becomes very difficult to accommodate. As long as people in Northern Ireland saw themselves as only Catholic or Protestant, their differences were difficult to reconcile. It is much easier if the people see that their identities are multiple and are complementary with the national identity. A majority of Belgians now feel that they are as much Belgian as they are Dutch or German-speaking. This helps them to stay together. This is how most people in our country see their identity: they think of themselves as Indian as well as belonging to a state or a language group or a social or religious community.

Second, it depends on how political leaders raise the demands of any community. It is easier to accommodate demands that are within the constitutional framework and are not at the cost of another community. The demand for 'only Sinhala' was at the cost of the interest and identity of the Tamil community in Sri Lanka. In Yugoslavia, the leaders of different ethnic communities presented their demands in such a way that these could not be accommodated within a single country.

Third, it depends on how the government reacts to demands of different groups. As we saw in the examples of Belgium and Sri Lanka, if the rulers are willing to share power and accommodate the reasonable demands of minority community, social divisions become less threatening for the country. But if they try to suppress such a demand in the name of national unity, the end result is often quite the opposite. Such attempts at forced integration often sow the seeds of disintegration. Thus the assertion of social diversities in a country need not be seen as a source of danger. In a democracy, political expression of social divisions is very normal and can be healthy. This allows various disadvantaged and marginal social groups to express their grievances and get the government to attend to these. Expression of

various kinds of social divisions in politics often results in their cancelling one another out and thus reducing their intensity. This leads to strengthening of a democracy.

*So, you are saying that too many small divisions are better than a single big division? Are you also saying that politics is a force of unity?*

But a positive attitude towards diversity and a willingness to accommodate it do not come about easily. People who feel marginalised, deprived and discriminated have to fight against the injustices. Such a fight often takes the democratic path, voicing their demands in a peaceful and constitutional manner and seeking a fair position through elections. Sometimes social differences can take the form of unacceptable level of social inequality and injustice. The struggle against such inequalities sometimes takes the path of violence and defiance of state power. However history shows that democracy is the best way to fight for recognition and also to accommodate diversity.

**Important Terms** **Homogeneous Society:** A society that has similar kinds of people, especially where there are no significant ethnic differences. **Black Power:** The Black Power Movement came into existence in 1966 and lasted till 1975. It was a militant and racist movement advocating even violence to end racism in the US. **Racism:** The unfair treatment of people who belong to a different race. **Atheist:** A person who does not believe in God or religion. **Overlapping Differences:** When some social differences overlaps with other differences, we call them overlapping differences. **Cross-cutting Differences:** When some social differences cross cut one another they are called cross-cutting differences. **Minority:** Communities which are less than half of the total population of the country. **Forum:** The lower courts are referred to as forums. **Social Differences:** Social diversity which is different from society to society. **Discrimination:** The practice of treating somebody or a particular group in society less-fairly than others. **Multicultural Community:** Social community formed on the basis of different cultures is termed as multi-cultural community. Generally, this is the result of migration. **Social Division:** Division of society on the basis of caste, race, religion, language, region, sex etc. **Disintegration:** The process of breaking into small parts.

## Chapter 4 Gender, Religion And Caste

### Overview

In the previous chapter we noted that the existence of social diversity does not threaten democracy. Political expression of social differences is possible and sometimes quite desirable in a democratic system. In this chapter we apply these ideas to the practice of democracy in India. We look at three kinds of social differences that can take the form of social divisions and inequalities. These are social differences based on gender, religion and caste. In each case we look at the nature of this division in India and how it gets expressed in politics. We also ask whether different expressions based on these differences are healthy or otherwise in a democracy.

### Gender and politics

Let us begin with gender division. This is a form of hierarchical social division seen everywhere, but is rarely recognised in the study of politics. The gender division tends to be understood as natural and unchangeable. However, it is not based on biology but on social expectations and stereotypes.

### Public/private division

Boys and girls are brought up to believe that the main responsibility of women is housework and bringing up children. This is reflected in a sexual division of labour in most families: women do all work inside the home such as cooking, cleaning, washing clothes, tailoring, looking after children, etc., and men do all the work outside the home. It is not that men cannot do housework; they simply think that it is for women to attend to these things. When these jobs are paid for, men are ready to take up these works. Most tailors or cooks in hotels are men. Similarly, it is not that women do not work outside their home. In villages, women fetch water, collect fuel and work in the fields. In urban areas, poor women work as domestic helper in middle class homes, while middle class women work in offices. In fact the majority of women do some sort of paid work in addition to domestic labour. But their work is not valued and does not get recognition.

*Why are we discussing things like household work in this textbook on Political Science? Is this politics? Why not? If politics is about power, then surely male dominance in the household should be considered political.*

The result of this division of labour is that although women constitute half of the humanity, their role in public life, especially politics, is minimal in most societies. Earlier, only men were allowed to participate in public affairs, vote and contest for public offices. Gradually the gender issue was raised in politics. Women in different parts of the world organised and agitated for equal rights. There were agitations in different countries for the extension of voting rights to women. These agitations demanded enhancing the political and legal status of women and improving their educational and career opportunities. More radical women's movements aimed at equality in personal and family life as well. These movements are called feminist movements.

Political expression of gender division and political mobilisation on this question helped to improve women's role in public life. We now find women working as scientists, doctors, engineers, lawyers, managers and college and university teachers which were earlier not considered suitable for women. In some parts of the world, for example in Scandinavian countries such as Sweden, Norway and Finland, the participation of women in public life is very high. In our country, women still lag much behind men despite some improvement since Independence. Ours is still a male-dominated, patriarchal society. Women face disadvantage, discrimination and oppression in various ways:

The literacy rate among women is only 54 per cent compared with 76 per cent among men. Similarly, a smaller proportion of girl students go for higher studies. When we look at school results, girls perform as well as boys, if not better in some places. But they drop out because parents prefer to spend their resources for their boys' education rather than spending equally on their sons and daughters.

No wonder the proportion of women among the highly paid and valued jobs is still very small. On an average an Indian woman works one hour more than an average man every day. Yet much of her work is not paid and therefore often not valued.

**Patriarchy:** Literally, rule by father, this concept is used to refer to a system that values men more and gives them power over women.

There are reports of various kinds of harassment,

exploitation and violence against women. Urban areas have become particularly unsafe for women. They are not safe even within their own home from beating, harassment and other forms of domestic violence.

### Women's political representation

All this is well known. Yet issues related to women's well being or otherwise are not given adequate attention. This has led many feminists and women's movements to the conclusion that unless women control power, their problems will not get adequate attention. One way to ensure this is to have more women as elected representatives.

Women in national parliaments in different regions of the world (in%)



Note: Figures are for the per cent of women in the directly elected chambers of parliament in 2006  
Source: <http://www.ipu.org/wmn-e/world.htm>

*Could you think of some reasons why women's representation is so low in India? Do you think America's and Europe have achieved a satisfactory level of women's representation?*

In India, the proportion of women in legislature has been very low. For example, the percentage of elected women members in Lok Sabha has crossed 10 per cent of its total strength for the first time in 2009. Their share in the state assemblies is less than 5 per cent. In this respect, India is among the bottom group of nations in the world (see the graph below). India is behind the averages for several developing countries of Africa and Latin America. In the government, cabinets are largely all-male even when a woman becomes the Chief Minister or the Prime Minister.

One way to solve this problem is to make it legally binding to have a fair proportion of women in the elected bodies. This is what the Panchayati Raj has done in India. One-third of seats in local government bodies – in panchayats and municipalities – are now reserved for women. Now there are more than 10 lakh elected women representatives in rural and urban local bodies. *If casteism and communalism are bad, what makes feminism a good thing? Why don't we oppose all those who divide the society on any lines – caste, religion or gender?*

Women's organisations and activists have been demanding a similar reservation of at least one-third of seats in the Lok Sabha and State Assemblies for women. A bill with this proposal has been pending before the Parliament for more than a decade. But there is no consensus over this among all the political parties. The bill has not been passed.

Gender division is an example that some form of social division needs to be expressed in politics. This also shows that disadvantaged groups do benefit when social divisions become a political issue. Do you think that women could have made the gains we noted above if their unequal treatment was not raised in the political domain?

### Religion, communalism and politics

Let us now turn to a very different kind of social division, the division based on religious differences. This division is not as universal as gender, but religious diversity is fairly widespread in the world today. Many countries including India have in their population, followers of different religions. As we noticed in the case of Northern Ireland, even when most of the people belong to the same religion, there can be serious differences about the way people practice that religion. Unlike gender differences, the religious differences are often expressed in the field of politics.

*I am not religious. Why should I bother about communalism and secularism?*

Human rights groups in our country have argued that most of the victims of communal riots in our country are people from religious minorities. They have demanded that the government take special steps to protect religious minorities.

Women's movement has argued that family laws of all religions discriminate against women. So they have demanded that government should change these laws to make them more equitable.

All these instances involve a relationship between religion and politics. But they do not seem very wrong or dangerous. Ideas, ideals and values drawn from different religions can and perhaps should play a role in politics. People should be able to express in politics their needs, interests and demands as a member of a religious community. Those who hold political power should sometimes be able to regulate the practice of religion so as to prevent discrimination and oppression. These political acts are not wrong as long as they treat every religion equally.

### **Communalism**

The problem begins when religion is seen as the basis of the nation. The example of Northern Ireland in Chapter 3 shows the dangers of such an approach to nationalism. The problem becomes more acute when religion is expressed in politics in exclusive and partisan terms, when one religion and its followers are pitted against another. This happens when beliefs of one religion are presented as superior to those of other religions, when the demands of one religious group are formed in opposition to another and when state power is used to establish domination of one religious group over the rest. This manner of using religion in politics is communal politics.

Communal politics is based on the idea that religion is the principal basis of social community. Communalism involves thinking along the following lines. The followers of a particular religion must belong to one community. Their fundamental interests are the same. Any difference that they may have is irrelevant or trivial for community life. It also follows that people who follow different religions cannot belong to the same social community. If the followers of different religion have some commonalities these are superficial and immaterial. Their interests are bound to be different and involve a conflict. In its extreme form communalism leads to the belief that people belonging to different religions cannot live as equal citizens within one nation. Either, one of them has to dominate the rest or they have to form different nations.

*I often crack jokes about people from one religion. Does that make me communal?*

This belief is fundamentally flawed. People of one religion do not have the same interests and aspirations in every context. Everyone has several other roles, positions and identities. There are many voices inside

every community. All these voices have a right to be heard. Therefore any attempt to bring all followers of one religion together in context other than religion is bound to suppress many voices within that community. Communalism can take various forms in politics: The most common expression of communalism is in everyday beliefs. These routinely involve religious prejudices, stereotypes of religious communities and belief in the superiority of one's religion over other religions. This is so common that we often fail to notice it, even when we believe in it.

A communal mind often leads to a quest for political dominance of one's own religious community. For those belonging to majority community, this takes the form of majoritarian dominance. For those belonging to the minority community, it can take the form of a desire to form a separate political unit.

**Family laws:** *Those laws that deal with family related matters such as marriage, divorce, adoption, inheritance, etc. In our country, different family laws apply to followers of different religions.*

Political mobilisation on religious lines is another frequent form of communalism. This involves the use of sacred symbols, religious leaders, emotional appeal and plain fear in order to bring the followers of one religion together in the political arena. In electoral politics this often involves special appeal to the interests or emotions of voters of one religion in preference to others.

Sometimes communalism takes its most ugly form of communal violence, riots and massacre. India and Pakistan suffered some of the worst communal riots at the time of the Partition. The post-Independence period has also seen large scale communal violence.

### **Secular state**

Communalism was and continues to be one of the major challenges to democracy in our country. The makers of our Constitution were aware of this challenge. That is why they chose the model of a secular state. This choice was reflected in several constitutional provisions that we studied last year:

There is no official religion for the Indian state. Unlike the status of Buddhism in Sri Lanka, that of Islam in Pakistan and that of Christianity in England, our Constitution does not give a special status to any religion.

The Constitution provides to all individuals and communities freedom to profess, practice and propagate any religion, or not to follow any.

The Constitution prohibits discrimination on grounds of religion.

At the same time, the Constitution allows the state to intervene in the matters of religion in order to ensure equality within religious communities. For example, it bans untouchability.

Understood in this sense, secularism is not just an ideology of some parties or persons. This idea constitutes one of the foundations of our country. Communalism should not be seen as a threat to some people in India. It threatens the very idea of India. That is why communalism needs to be combated. A secular Constitution like ours is necessary but not sufficient to combat communalism. Communal prejudices and propaganda need to be countered in everyday life and religion-based mobilisation needs to be countered in the arena of politics.

### **Caste and politics**

We have seen two instances of the expression of social divisions in the arena of politics, one largely positive and



the other largely negative. Let us turn to our final case, that of caste and politics, that has both positive and the negative aspects.

### Caste inequalities

Unlike gender and religion, caste division is special to India. All societies have some kind of social inequality and some form of division of labour. In most societies, occupations are passed on from one generation to another. Caste system is an extreme form of this. What makes it different from other societies is that in this system, hereditary occupational division was sanctioned by rituals. Members of the same caste group were supposed to form a social community that practiced the same or similar occupation, married within the caste group and did not eat with members from other caste groups.

Caste system was based on exclusion of and discrimination against the 'outcaste' groups. They were subjected to the inhuman practice of untouchability. That is why political leaders and social reformers like Jotiba Phule, Gandhiji, B.R. Ambedkar and Periyar Ramaswami Naicker advocated and worked to establish a society in which caste inequalities are absent.

### Social and Religious Diversity of India

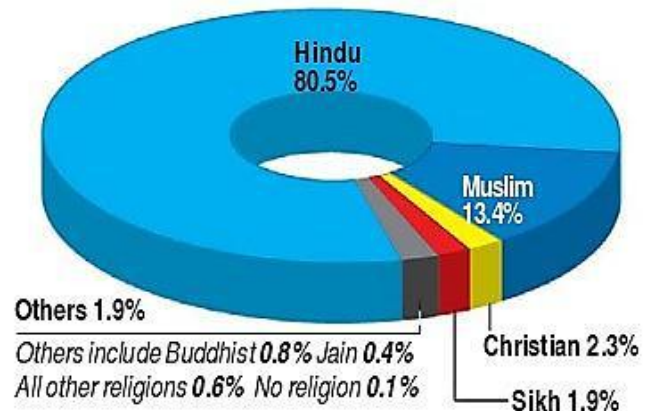
The Census of India records the religion of each and every Indian after every ten years. The person who fills the Census form visits every household and records the religion of each member of that household exactly the way each person describes it. If someone says she has 'no religion' or that he is an 'atheist', this is exactly how it is recorded. Thus we have reliable information on the proportion of different religious communities in the country and how it has changed over the years. The pie chart below presents the population proportion of six major religious groups in the country.

Since Independence, the total population of each group has increased substantially but their proportion in the country's population has not changed much. In percentage terms, the population of the Hindus, Jains and Christians has declined marginally since 1961. The proportion of Muslim, Sikh and Buddhist population has increased slightly. There is a common but mistaken impression that the proportion of the Muslims in the country's population is going to overtake other religious groups. Expert estimates done for the Prime Minister's High Level Committee (popularly known as Sachar Committee) show that the proportion of the Muslims is expected to go up a little, by about 3 to 4 per cent, in the next 50 years. It proves that in overall terms, the population balance of different religious groups is not likely to change in a big way.

The same is true of the major caste groups. The Census of India counts two social groups: the Scheduled Castes and the Scheduled Tribes. Both these broad groups include hundreds of castes or tribes whose names are listed in an official Schedule. Hence the prefix 'Scheduled' in their name. The Scheduled Castes, commonly known as Dalits, include those that were previously regarded as 'outcaste' in the Hindu social order and were subjected to exclusion and untouchability. The Scheduled Tribes, often referred to as Adivasis, include those communities that led a secluded life usually in hills and forests and did not interact much with the rest of society. In 2001, the Scheduled Castes were 16.2 per cent and the Scheduled Tribes were 8.2 per cent of the country's population. The Census does not yet count the Other Backward Classes. Hence there are some differences about their proportion in the country's population. The National

Sample Survey of 2004-05 estimates their population to be around 41 per cent. Thus the SC, ST and the OBC together account for about two-thirds of the country's population and about three-fourths of the Hindu population.

### Population of different religious group in India, 2001



Source: Census of India, 2001

Partly due to their efforts and partly due to other socio-economic changes, castes and caste system in modern India have undergone great changes. With economic development, large scale urbanisation, growth of literacy and education, occupational mobility and the weakening of the position of landlords in the villages, the old notions of caste hierarchy are breaking down. Now, most of the times, in urban areas it does not matter much who is walking along next to us on a street or eating at the next table in a restaurant. The Constitution of India prohibited any caste-based discrimination and laid the foundations of policies to reverse the injustices of the caste system. If a person who lived a century ago were to return to India, she would be greatly surprised at the change that has come about in the country.

*I don't care what my caste is. Why are we discussing all this in the textbook? Are we not promoting casteism by talking about caste? Now you don't like it Didn't you tell me that wherever there is domination, we should discuss it in Political Science? Will caste disappear if we keep mum about it?*

Yet caste has not disappeared from contemporary India. Some of the older aspects of caste have persisted. Even now most people marry within their own caste or tribe. Untouchability has not ended completely, despite constitutional prohibition. Effects of centuries of advantages and disadvantages continue to be felt today. The caste groups that had access to education under the old system have done very well in acquiring modern education as well. Those groups that did not have access to education or were prohibited from acquiring it have naturally lagged behind. That is why there is a disproportionately large presence of 'upper caste' among the urban middle classes in our country. Caste continues to be closely linked to economic status.

**Urbanisation:** Shift of population from rural areas to urban areas

**Occupational mobility:** Shift from one occupation to another, usually when a new generation takes up occupations other than those practiced by their ancestors.

**Caste hierarchy:** A ladder like formation in which all the caste groups are placed from the 'highest' to the 'lowest' castes.

**Caste in politics**

As in the case of communalism, casteism is rooted in the belief that caste is the sole basis of social community. According to this way of thinking, people belonging to the same caste belong to a natural social community and have the same interests which they do not share with anyone from another caste. As we saw in the case of communalism, such a belief is not borne out by our experience. Caste is one aspect of our experience but it is not the only relevant or the most important aspect. Caste can take various forms in politics:

When parties choose candidates in elections, they keep in mind the caste composition of the electorate and nominate candidates from different castes so as to muster necessary support to win elections. When governments are formed, political parties usually take care that representatives of different castes and tribes find a place in it.

### Caste inequality today

Caste is an important source of economic inequality because it regulates access to resources of various kinds. For example, in the past, the so-called 'untouchable' castes were denied the right to own land, while only the so-called 'twice born' castes had the right to education. Although this kind of explicit and formalised inequality based on caste is now outlawed, the effects of centuries of accumulated advantages and disadvantages continue to be felt. Moreover, new kinds of inequalities have also developed.

The relationship between caste and economic status has certainly changed a lot. Today, it is possible to find very rich and very poor people in every caste, whether 'low' or 'high'. This was not true even twenty or thirty years ago – it was very rare indeed to find rich people among the 'lowest' castes. However, as this evidence from the National Sample Survey shows, caste continues to be very strongly linked to economic status in many important ways:

The average economic status (measured by criteria like monthly consumption expenditure) of caste groups still follows the old hierarchy – the 'upper' castes are best off, the Dalits and Adivasis are worst off, and the backward classes are in between.

Although every caste has some poor members, the proportion living in extreme poverty (below the official 'poverty line') is much higher for the lowest castes and much lower for the upper castes, with the backward classes once again in between.

Although every caste has some members who are rich, the upper castes are heavily over-represented among the rich while the lower castes are severely under-represented.

Political parties and candidates in elections make appeals to caste sentiment to muster support. Some political parties are known to favour some castes and are seen as their representatives.

Universal adult franchise and the principle of one-person-one-vote compelled political leaders to gear up to the task of mobilising and securing political support. It also brought new consciousness among the people of castes that were hitherto treated as inferior and low. The focus on caste in politics can sometimes give an impression that elections are all about caste and nothing else. That is far from true. Just consider these:

No parliamentary constituency in the country has a clear majority of one single caste. So, every candidate and party needs to win the confidence of more than one caste and community to win elections.

No party wins the votes of all the voters of a caste or community. When people say that a caste is a 'vote

bank' of one party, it usually means that a large proportion of the voters from that caste vote for that party.

Many political parties may put up candidates from the same caste (if that caste is believed to dominate the electorate in a particular constituency). Some voters have more than one candidate from their caste while many voters have no candidate from their caste.

The ruling party and the sitting MP or MLA frequently lose elections in our country. That could not have happened if all castes and communities were frozen in their political preferences.

Clearly, while caste matters in electoral politics, so do many other factors. The voters have strong attachment to political parties which is often stronger than their attachment to their caste or community. People within the same caste or community have different interests depending on their economic condition. Rich and poor or men and women from the same caste often vote very differently. People's assessment of the performance of the government and the popularity rating of the leaders matter and are often decisive in elections.

### Politics in caste

**We have so far looked at what caste does to politics. But it does not mean that there is only a one-way relation between caste and politics.**

**Politics too influences the caste system and caste identities by bringing them into the political arena.**



*Do you think that political leaders are right to treat people belonging to a caste as 'vote banks'?*

Thus, it is not politics that gets caste-ridden, it is the caste that gets politicised. This takes several forms:

Each caste group tries to become bigger by incorporating within it neighbouring castes or sub-castes which were earlier excluded from it.

Various caste groups are required to enter into a coalition with other castes or communities and thus enter into a dialogue and negotiation.

New kinds of caste groups have come up in the political arena like 'backward' and 'forward' caste groups.

Thus, caste plays different kinds of roles in politics. In some situations, expression of caste differences in politics gives many disadvantaged communities the space to demand their share of power. In this sense-caste politics has helped people from Dalits and OBC castes to gain better access to decision making. Several political and non-political organisations have been demanding and agitating for an end to discrimination against particular castes, for more dignity and more



access to land, resources and opportunities. At the same time exclusive attention to caste can produce negative results as well. As in the case of religion, politics based on caste identity alone is not very healthy in a democracy. It can divert attention from other pressing issues like poverty, development and corruption. In some cases caste division leads to tensions, conflict and even violence.

**Important Terms** **Gender Division:** It is a form of hierarchical social division based on social expectations and stereotypes. **Sex Ratio:** It is defined as number of females per 1000 male in a country in a given period of time. **Sexual Division of Labour:** A system in which all work inside the home is either done by the women of the family, or organised by them through the domestic helpers. **Feminist:** A person who believes in equal rights and opportunities for all human beings. **Patriarchy:** A system where father is the head of the family. **Stereotype:** An image or idea of a particular type of person or thing that has become fixed through being widely held. **Feminism:** It is concerned with the empowerment of women and giving women equal status in the society as men. **Communalism:** It means attempts to promote religious ideas between groups of people as identified by different communities. **Prejudice:** An unreasonable dislike or preference for a person, group, custom, etc., especially when it is based on their race, religion, sex, etc. **Secular State:** A state which does not have any official religion. It provides equal status to all religions. **Secularism:** A belief that religion should not be involved in the organization of society. **Occupational Mobility:** Shift from one occupation to another, usually when a new generation takes up occupations other than those practiced by their ancestors.

## Chapter 5 Popular Struggles And Movements

### Overview

In the earlier chapters we discussed why power sharing is important in a democracy and how different tiers of government and various social groups share power. In this chapter we will carry this discussion further and see how those who exercise power are constrained by the influence and pressure exerted on them. Democracy almost invariably involves conflict of interests and viewpoints. These differences are often expressed in organised ways. Those who are in power are required to balance these conflicting demands and pressures. We begin this chapter with a discussion of how struggles around conflicting demands and pressures shape democracy. This leads to an analysis of the different ways and organisations through which ordinary citizen can play a role in democracy. In this chapter, we look at the indirect ways of influencing politics, through pressure groups and movements. This leads us in the next chapter to the direct ways of controlling political power in the form of political parties.

### Popular struggles in Nepal and Bolivia

Let us read two recent stories of that kind and see how power is exercised in democracy.

#### Movement for democracy in Nepal

Nepal witnessed an extraordinary popular movement in April 2006. The movement was aimed at restoring democracy. Nepal, you might recall, was one of the 'third wave' countries that had won democracy in 1990. Although the king formally remained the head of the state, the real power was exercised by popularly elected representatives. King Birendra, who has accepted this transition from absolute monarchy to constitutional monarchy, was killed in a mysterious massacre of the royal family in 2001. King Gyanendra, the new king of Nepal, was not prepared to accept democratic rule. He

took advantage of the weakness and unpopularity of the democratically elected government. In February 2005, the king dismissed the then Prime Minister and dissolved the popularly elected Parliament. The movement of April 2006 was aimed at regaining popular control over the government from the king.

All the major political parties in the parliament formed a Seven Party Alliance (SPA) and called for a four-day strike in Kathmandu, the country's capital. This protest soon turned into an indefinite strike in which Maoist insurgents and various other organisations joined hands. People defied curfew and took to the streets. The security forces found themselves unable to take on more than a lakh people who gathered almost every day to demand restoration of democracy. The number of protesters reached between three and five lakhs on 21 April and they served an ultimatum to the king. The leaders of the movement rejected the half-hearted concessions made by the king. They stuck to their demands for restoration of parliament, power to an all-party government and a new constituent assembly.

**Maoists:** *Those communists who believe in the ideology of Mao, the leader of the Chinese Revolution. They seek to overthrow the government through an armed revolution so as to establish the rule of the peasants and workers.*

On 24 April 2006, the last day of the ultimatum, the king was forced to concede all the three demands. The SPA chose Girija Prasad Koirala as the new Prime Minister of the interim government. The restored parliament met and passed laws taking away most of the powers of the king. The SPA and the Maoists came to an understanding about how the new Constituent Assembly was going to be elected. This struggle came to be known as Nepal's second movement for democracy. The struggle of the Nepali people is a source of inspiration to democrats all over the world.

#### Bolivia's Water War

The story of Poland and that of Nepal apply to the struggle for establishing or restoring democracy. But the role of popular struggles does not come to an end with the establishment of democracy. People's successful struggle against privatisation of water in Bolivia reminds us that popular struggles are integral to the working of democracy.

Bolivia is a poor country in Latin America. The World Bank pressurised the government to give up its control of municipal water supply. The government sold these rights for the city of Cochabamba to a multi-national company (MNC). The company immediately increased the price of water by four times. Many people received monthly water bill of Rs 1000 in a country where average income is around Rs 5000 a month. This led to a spontaneous popular protest.

*Are you suggesting that strike, dharna, bandh and demonstration are good for democracy?*

In January 2000, a new alliance of labour, human rights and community leaders organised a successful four-day general strike in the city. The government agreed to negotiate and the strike was called off. Yet nothing happened. The police resorted to brutal repression when the agitation was started again in February. Another strike followed in April and the government imposed martial law. But the power of the people forced the officials of the MNC to flee the city and made the government concede to all the demands of the protesters. The contract with the MNC was cancelled and water supply was restored to the municipality at old rates. This came to be known as Bolivia's water war.



### Democracy and popular struggles

These two stories are from very different contexts. The movement in Nepal was to establish democracy, while the struggle in Bolivia involved claims on an elected, democratic government. The popular struggle in Bolivia was about one specific policy, while the struggle in Nepal was about the foundations of the country's politics. Both these struggles were successful but their impact was at different levels.

Despite these differences, both the stories share some elements which are relevant to the study of the past and future of democracies. Both these are instances of political conflict that led to popular struggles. In both cases the struggle involved mass mobilisation. Public demonstration of mass support clinched the dispute. Finally, both instances involved critical role of political organisations. We can, therefore, draw a few conclusions from these examples:

Democracy evolves through popular struggles. It is possible that some significant decisions may take place through consensus and may not involve any conflict at all. But that would be an exception. Defining moments of democracy usually involve conflict between those groups who have exercised power and those who aspire for a share in power. These moments come when the country is going through transition to democracy, expansion of democracy or deepening of democracy. Democratic conflict is resolved through mass mobilisation. Sometimes it is possible that the conflict is resolved by using the existing institutions like the parliament or the judiciary. But when there is a deep dispute, very often these institutions themselves get involved in the dispute. The resolution has to come from outside, from the people.

*Does it mean that whichever side manages to mobilise a bigger crowd gets away with whatever it wants? Are we saying that 'Might is Right' in a democracy?*

These conflicts and mobilisations are based on new political organisations. True, there is an element of spontaneity in all such historic moments. But the spontaneous public participation becomes effective with the help of organised politics. There can be many agencies of organised politics. These include political parties, pressure groups and movement groups. Suppose you belong to any of the following groups, what arguments would you put forward to defend your side: a local farmer, an environmental activist, a government official working in this company or just a consumer of paper.

### Mobilisation and organisations

Let us go back to our two examples and look at the organisations that made these struggles successful. We noted that the call for indefinite strike was given by the SPA or the Seven Party Alliance in Nepal. This alliance included some big parties that had some members in the Parliament. But the SPA was not the only organisation behind this mass upsurge. The protest was joined by the Nepalese Communist Party (Maoist) which did not believe in parliamentary democracy. This party was involved in an armed struggle against the Nepali government and had established its control over large parts of Nepal.

The struggle involved many organisations other than political parties. All the major labour unions and their federations joined this movement. Many other organisations like the organisation of the indigenous people, teachers, lawyers and human rights groups extended support to the movement.

*I don't like this word 'mobilisation'. Makes it feel as if*

*people are like sheep.*

The protest against water privatisation in Bolivia was not led by any political party. It was led by an organisation called FEDECOR. This organisation comprised local professionals, including engineers and environmentalists. They were supported by a federation of farmers who relied on irrigation, the confederation of factory workers' unions, middle class students from the the University of Cochabamba and the city's growing population of homeless street children. The movement was supported by the Socialist Party. In 2006, this party came to power in Bolivia.

From both these examples, we can see that in a democracy several different kinds of organisations work behind any big struggle. These organisations play their role in two ways. One obvious way of influencing the decisions in a democracy is direct participation in competitive politics. This is done by creating parties, contesting elections and forming governments. But every citizen does not participate so directly. They may not have the desire, the need or the skills to take part in direct political activity other than voting.

*Governments initiate schemes and programmes to alleviate the suffering of the poor and meet their basic needs. But poverty remains in the country. What could be the reasons for such a situation?*

There are many indirect ways in which people can get governments to listen to their demands or their points of view. They could do so by forming an organisation and undertaking activities to promote their interests or their viewpoints. These are called interest groups or pressure groups. Sometimes people decide to act together without forming organisations.

*Can you identify the pressure groups functioning in the news clippings given here? What demand are they making?*

### Pressure groups and movements

Pressure groups are organisations that attempt to influence government policies. But unlike political parties, pressure groups do not aim to directly control or share political power. These organisations are formed when people with common occupation, interest, aspirations or opinions come together in order to achieve a common objective.

In the course of the discussion above we came across entities that are not quite an organisation. The struggle in Nepal was called a movement for democracy. We often hear the word people's movement to describe many forms of collective action: Narmada Bachao Andolan, Movement for Right to Information, Anti-liquor Movement, Women's Movement, Environmental Movement. Like an interest group, a movement also attempts to influence politics rather than directly take part in electoral competition. But unlike the interest groups, movements have a loose organisation. Their decision making is more informal and flexible. They depend much more on spontaneous mass participation than an interest group.

### Sectional interest groups and public interest groups

Usually interest groups seek to promote the interests of a particular section or group of society. Trade unions, business associations and professional (lawyers, doctors, teachers, etc.) bodies are some examples of this type. They are sectional because they represent a section of society: workers, employees, business-persons, industrialists, followers of a religion, caste group, etc. Their principal concern is the betterment and well-being of their members, not society in general.

Sometimes these organisations are not about representing the interest of one section of society. They represent some common or general interest that needs to be defended. The members of the organisation may not benefit from the cause that the organisation represents. The Bolivian organisation, FEDECOR is an example of that kind of an organisation. In the context of Nepal, we noted the participation of human rights organisations.

These second type of groups are called promotional groups or public interest groups. They promote collective rather than selective good. They aim to help groups other than their own members. For example, a group fighting against bonded labour fights not for itself but for those who are suffering under such bondage. In some instances the members of a public interest group may undertake activity that benefits them as well as others too. For example, BAMCEF (Backward and Minority Communities Employees Federation) is an organisation largely made up of government employees that campaigns against caste discrimination. It addresses the problems of its members who suffer discrimination. But its principal concern is with social justice and social equality for the entire society.

### **Movement groups**

As in the case of interest groups, the groups involved with movements also include a very wide variety. The various examples mentioned above already indicate a simple distinction. Most of the movements are issue-specific movements that seek to achieve a single objective within a limited time frame. Others are more general or generic movements that seek to achieve a broad goal in the very long term.

The Nepalese movement for democracy arose with the specific objective of reversing the king's orders that led to suspension of democracy. In India, Narmada Bachao Andolan is a good example of this kind of movement. The movement started with the specific issue of the people displaced by the creation of Sardar Sarovar dam on the Narmada river. Its objective was to stop the dam from being constructed. Gradually it became a wider movement that questioned all such big dams and the model of development that required such dams. Movements of this kind tend to have a clear leadership and some organisation. But their active life is usually short.

*Social movements and pressure groups try to mobilise citizens in many ways. The collage here shows some of them.*

These single-issue movements can be contrasted with movements that are long term and involve more than one issue. The environmental movement and the women's movement are examples of such movements. There is no single organisation that controls or guides such movements. Environmental movement is a label for a large number of organisations and issue-specific movements.

*Many democratic governments provide the Right to Information (RTI) to the citizens. The RTI Act, 2005 is a landmark legislation passed by our Parliament. Under this Act, citizens can seek information from government offices pertaining to different activities.*

All of these have separate organisations, independent leadership and often different views on policy related matters. Yet all of these share a broad objective and have a similar approach. That is why they are called a movement. Sometimes these broad movements have a loose umbrella organisation as well. For example, the National Alliance for Peoples' Movements (NAPM) is an

organisation of organisations. Various movement groups struggling on specific issues are constituents of this loose organisation which coordinates the activities of a large number of peoples' movements in our country.

### **How do they influence politics?**

Pressure groups and movements exert influence on politics in a variety of ways:

They try to gain public support and sympathy for their goals and their activities by carrying out information campaigns, organising meetings, filing petitions, etc.

Most of these groups try to influence the media into giving more attention to these issues.

They often organise protest activity like strikes or disrupting government programmes. Workers' organisations, employees' associations and most of the movement groups often resort to these tactics in order to force the government to take note of their demands. Business groups often employ professional lobbyists or sponsor expensive advertisements. Some persons from pressure groups or movement groups may participate in official bodies and committees that offer advice to the government.

While interest groups and movements do not directly engage in party politics, they seek to exert influence on political parties. Most of the movement groups take a political stance without being a party. They have political ideology and political position on major issues. The relationship between political parties and pressure groups can take different forms, some direct and others very indirect:

In some instances, the pressure groups are either formed or led by the leaders of political parties or act as extended arms of political parties. For example, most trade unions and students' organisations in India are either established by, or affiliated to one or the other major political party. Most of the leaders of such pressure groups are usually activists and leaders of party. Sometimes political parties grow out of movements. For example, when the Assam movement led by students against the 'foreigners' came to an end, it led to the formation of the Asom Gana Parishad. The roots of parties like the DMK and the AIADMK in Tamil Nadu can be traced to a long-drawn social reform movement during the 1930s and 1940s.

In most cases the relationship between parties and interest or movement groups is not so direct. They often take positions that are opposed to each other. Yet they are in dialogue and negotiation. Movement groups have raised new issues that have been taken up by political parties. Most of the new leadership of political parties comes from interest or movement groups.

### **Is their influence healthy?**

It may initially appear that it is not healthy for groups that promote interest of one section to have influence in democracy.

A democracy must look after the interests of all, not just one section. Also, it may seem that these groups wield power without responsibility. Political parties have to face the people in elections, but these groups are not accountable to the people. Pressure groups and movements may not get their funds and support from the people. Sometimes, pressure groups with small public support but lots of money can hijack public discussion in favour of their narrow agenda.

On balance, however, pressure groups and movements have deepened democracy. Putting pressure on the rulers is not an unhealthy activity in a democracy as long as everyone gets this opportunity. Governments can often come under undue pressure from a small group of

rich and powerful people. Public interest groups and movements perform a useful role of countering this undue influence and reminding the government of the needs and concerns of ordinary citizens.

Even the sectional interest groups play a valuable role. Where different groups function actively, no one single group can achieve dominance over society. If one group brings pressure on government to make policies in its favour, another will bring counter pressure not to make policies in the way the first group desires. The government gets to hear about what different sections of the population want. This leads to a rough balance of power and accommodation of conflicting interests.

## Chapter 6 Political Parties

### Overview

In this textbook, we have glanced at political parties as vehicles of federal sharing of political power and as negotiators of social divisions in the arena of democratic politics. Before concluding this tour, let us take a close look at the nature and working of political parties, especially in our country. We begin by asking two common questions: Why do we need parties? How many parties are good for a democracy? In the light of these, we introduce the national and regional political parties in today's India and then look at what is wrong with political parties and what can be done about it.

### Why do we need political parties?

Political parties are easily one of the most visible institutions in a democracy. For most ordinary citizens, democracy is equal to political parties. If you travel to remote parts of our country and speak to the less educated citizens, you could come across people who may not know anything about our Constitution or about the nature of our government. But chances are that they would know something about our political parties. At the same time this visibility does not mean popularity. *So, you agree with me. Parties are partial, partisan and lead to partitions. Parties do nothing but divide people. That is their real function*

Most people tend to be very critical of political parties. They tend to blame parties for all that is wrong with our democracy and our political life. Parties have become identified with social and political divisions.

Therefore, it is natural to ask – do we need political parties at all? About hundred years ago there were few countries of the world that had any political party. Now there are few that do not have parties. Why did political parties become so omnipresent in democracies all over the world? Let us first answer what political parties are and what they do, before we say why we need them.

### Meaning

A political party is a group of people who come together to contest elections and hold power in the government. They agree on some policies and programmes for the society with a view to promote the collective good. Since there can be different views on what is good for all, parties try to persuade people why their policies are better than others. They seek to implement these policies by winning popular support through elections. Thus, parties reflect fundamental political divisions in a society. Parties are about a part of the society and thus involve partisanship. Thus a party is known by which part it stands for, which policies it supports and whose interests it upholds. A political party has three components: the leaders, the active members and the

followers

### Functions

What does a political party do? Basically, political parties fill political offices and exercise political power. Parties do so by performing a series of functions:

1 Parties **contest elections**. In most democracies, elections are fought mainly among the candidates put up by political parties. Parties select their candidates in different ways. In some countries, such as the USA, members and supporters of a party choose its candidates. Now more and more countries are following this method. In other countries like India, top party leaders choose candidates for contesting elections.

**Partisan:** *A person who is strongly committed to a party, group or faction. Partisanship is marked by a tendency to take a side and inability to take a balanced view on an issue.*

2 Parties put forward different **policies and programmes** and the voters choose from them. Each of us may have different opinions and views on what policies are suitable for the society. But no government can handle such a large variety of views. In a democracy, a large number of similar opinions have to be grouped together to provide a direction in which policies can be formulated by the governments. This is what the parties do. A party reduces a vast multitude of opinions into a few basic positions which it supports. A government is expected to base its policies on the line taken by the ruling party.

3 Parties play a decisive role in **making laws** for a country. Formally, laws are debated and passed in the legislature. But since most of the members belong to a party, they go by the direction of the party leadership, irrespective of their personal opinions.

4 Parties **form and run governments**. As we noted last year, the big policy decisions are taken by political executive that comes from the political parties. Parties recruit leaders, train them and then make them ministers to run the government in the way they want. *Okay, granted that we can't live without political parties. But tell me on what grounds do people support a political party?*

5 Those parties that lose in the elections play the **role of opposition** to the parties in power, by voicing different views and criticising government for its failures or wrong policies. Opposition parties also mobilise opposition to the government.

6 Parties **shape public opinion**. They raise and highlight issues. Parties have lakhs of members and activists spread all over the country. Many of the pressure groups are the extensions of political parties among different sections of society. Parties sometimes also launch movements for the resolution of problems faced by people. Often opinions in the society crystallise on the lines parties take.

**Ruling Party:** *Political party that runs government.*

7 Parties provide people **access to government machinery and welfare schemes** implemented by governments. For an ordinary citizen it is easy to approach a local party leader than a government officer. That is why, they feel close to parties even when they do not fully trust them. Parties have to be responsive to people's needs and demands. Otherwise people can reject those parties in the next elections.

### Necessity

This list of functions in a sense answers the question asked above: we need political parties because they perform all these functions. But we still need to ask why modern democracies cannot exist without political



parties. We can understand the necessity of political parties by imagining a situation without parties. Every candidate in the elections will be independent. So no one will be able to make any promises to the people about any major policy changes. The government may be formed, but its utility will remain ever uncertain. Elected representatives will be accountable to their constituency for what they do in the locality. But no one will be responsible for how the country will be run. We can also think about it by looking at the non-party based elections to the panchayat in many states. Although, the parties do not contest formally, it is generally noticed that the village gets split into more than one faction, each of which puts up a 'panel' of its candidates. This is exactly what the party does. That is the reason we find political parties in almost all countries of the world, whether these countries are big or small, old or new, developed or developing. The rise of political parties is directly linked to the emergence of representative democracies. As we have seen, large societies need representative democracy. As societies became large and complex, they also needed some agency to gather different views on various issues and to present these to the government. They needed some ways, to bring various representatives together so that a responsible government could be formed. They needed a mechanism to support or restrain the government, make policies, justify or oppose them. Political parties fulfill these needs that every representative government has. We can say that parties are a necessary condition for a democracy.

How many parties should we have?

In a democracy any group of citizens is free to form a political party. In this formal sense, there are a large number of political parties in each country. More than 750 parties are registered with the Election Commission of India. But not all these parties are serious contenders in the elections. Usually only a handful of parties are effectively in the race to win elections and form the government. So the question, then is: how many major or effective parties are good for a democracy?

In some countries, only one party is allowed to control and run the government. These are called one-party systems.

China, only the Communist Party is allowed to rule. Although, legally speaking, people are free to form political parties, it does not happen because the electoral system does not permit free competition for power. We cannot consider one-party system as a good option because this is not a democratic option. Any democratic system must allow at least two parties to compete in elections and provide a fair chance for the competing parties to come to power.

In some countries, power usually changes between two main parties. Several other parties may exist, contest elections and win a few seats in the national legislatures. But only the two main parties have a serious chance of winning majority of seats to form government. Such a party system is called two-party system. The United States of America and the United Kingdom are examples of two-party system.

If several parties compete for power, and more than two parties have a reasonable chance of coming to power either on their own strength or in alliance with others, we call it a multiparty system. Thus in India, we have a multiparty system. In this system, the government is formed by various parties coming together in a coalition. When several parties in a multi-party system join hands for the purpose of contesting elections and winning

power, it is called an alliance or a front. For example, in India there were three such major alliances in 2004 parliamentary elections— the National Democratic Alliance, the United Progressive Alliance and the Left Front. The multiparty system often appears very messy and leads to political instability. At the same time, this system allows a variety of interests and opinions to enjoy political representation.

*I wonder how politicians manage these coalitions. I can't even remember the names of all the parties.*

So, which of these is better? Perhaps the best answer to this very common question is that this is not a very good question. Party system is not something any country can choose. It evolves over a long time, depending on the nature of society, its social and regional divisions, its history of politics and its system of elections. These cannot be changed very quickly. Each country develops a party system that is conditioned by its special circumstances. For example, if India has evolved a multiparty system, it is because the social and geographical diversity in such a large country is not easily absorbed by two or even three parties. No system is ideal for all countries and all situations

### Popular participation in political parties

It is often said that political parties are facing a crisis because they are very unpopular and the citizens are indifferent to political parties. The available evidence shows that this belief is only partly true for India. The evidence, based on a series of large sample surveys conducted over several decades, shows that:

Political parties do not enjoy much trust among the people in South Asia. The proportion of those who say their trust in political parties is 'not much' or 'not at all' is more than those who have 'some' or 'great' trust. The same is true of most other democracies as well. Political parties are one of the least trusted institutions all over the world.

Yet the level of participation in the activities of political parties was fairly high. The proportion of those who said they were members of some political party was higher in India than many advanced countries like Canada, Japan, Spain and South Korea.

Over the last three decades the proportion of those who report to be members of political parties in India has gone up steadily.

The proportion of those who say they feel 'close to a political party' has also gone up in India in this period.

### National political parties

Democracies that follow a federal system all over the world tend to have two kinds of political parties: parties that are present in only one of the federal units and parties that are present in several or all units of the federation. This is the case in India as well. There are some country-wide parties, which are called 'national parties'. These parties have their units in various states. But by and large, all these units follow the same policies, programmes and strategy that is decided at the national level.

Every party in the country has to register with the Election Commission. While the Commission treats all parties equally, it offers some special facilities to large and established parties. These parties are given a unique symbol – only the official candidates of that party can use that election symbol. Parties that get this privilege and some other special facilities are 'recognised' by the Election Commission for this purpose. That is why these parties are called, 'recognised political parties'. The Election Commission has laid down detailed criteria of the proportion of votes and seats that a party

must get in order to be a recognised party. A party that secures at least six per cent of the total votes in an election to the Legislative Assembly of a State and wins at least two seats is recognised as a State party. A party that secures at least six per cent of the total votes in Lok Sabha elections or Assembly elections in four States and wins at least four seats in the Lok Sabha is recognised as a national party.

According to this classification, there were six national recognised parties in the country in 2006. Let us learn something about each of these parties.



**Indian National Congress (INC):** Popularly known as the Congress Party. One of the oldest parties of the world. Founded in 1885 and has experienced many splits. Played a dominant role in Indian politics at the national and state level for several decades after India's Independence. Under the leadership of Jawaharlal Nehru, the party sought to build a modern secular democratic republic in India. Ruling party at the centre till 1977 and then from 1980 to 1989. After 1989, its support declined, but it continues to be present throughout the country, cutting across social divisions. A centrist party (neither rightist nor leftist) in its ideological orientation, the party espouses secularism and welfare of weaker sections and minorities. Supports new economic reforms but with a human face. Emerged as the largest party with 145 members in the Lok Sabha elections held in 2004. Currently leads the ruling United Progressive Alliance coalition government at the Centre.



**Bharatiya Janata Party (BJP):** Founded in 1980 by reviving the erstwhile Bharatiya Jana Sangh. Wants to build a strong and modern India by drawing inspiration from India's ancient culture and values. Cultural nationalism (or 'Hindutva') is an important element in its conception of Indian nationhood and politics. Wants full territorial and political integration of Jammu and Kashmir with India, a uniform civil code for all people living in the country irrespective of religion, and ban on religious conversions. Its support base increased substantially in the 1990s. Earlier limited to north and west and to urban areas, the party expanded its support in the south, east, the north-east and to rural areas. Came to power in 1998 as the leader of the National Democratic Alliance including several state and regional parties. Lost elections in 2004 and is the principal opposition party in the Lok Sabha.



**Bahujan Samaj Party (BSP):** Formed in 1984 under the leadership of Kanshi Ram. Seeks to represent and secure power for the bahujan samaj which includes the dalits, adivasis, OBCs and religious minorities. Draws inspiration from the ideas and teachings of Sahu Maharaj, Mahatma Phule, Periyar Ramaswami Naicker and Babasaheb Ambedkar. Stands for the cause of securing the interests and welfare of the dalits and oppressed people. It has its main base in the state of Uttar Pradesh and substantial presence in neighbouring states like Madhya Pradesh, Chhattisgarh, Uttarakhand, Delhi and Punjab. Formed government in Uttar Pradesh several times by taking the support of different parties at different times. In the Lok Sabha elections held in 2004, it polled about 5 per cent votes and secured 19 seats in the Lok Sabha.



### Communist Party of India - Marxist (CPI-M):

Founded in 1964. Believes in Marxism-Leninism. Supports socialism, secularism and democracy and opposes imperialism and communalism. Accepts democratic elections as a useful and helpful means for securing the objective of socio-economic justice in India. Enjoys strong support in West Bengal, Kerala and Tripura, especially among the poor, factory workers, farmers, agricultural labourers and the intelligentsia. Critical of the new economic policies that allow free flow of foreign capital and goods into the country. Has been in power in West Bengal without a break for 30 years. In 2004 elections, it won about 6 per cent of votes and 43 seats in the Lok Sabha. Currently supports the UPA government from outside, without joining the government.



### Communist Party of India (CPI):

Formed in 1925. Believes in Marxism-Leninism, secularism and democracy. Opposed to the forces of secessionism and communalism. Accepts parliamentary democracy as a means of promoting the interests of the working class, farmers and the poor. Became weak after the split in the party in 1964 that led to the formation of the CPI(M). Significant presence in the states of Kerala, West Bengal, Punjab, Andhra Pradesh and Tamil Nadu. Its support base had gradually declined over the years. It secured about 1.4 per cent votes and 10 seats in the 2004 Lok Sabha elections. Advocates the coming together of all left parties to build a strong left front. Currently supports UPA government from outside.



**Nationalist Congress Party (NCP):** Formed in 1999 following a split in the Congress party. Espouses democracy, Gandhian secularism, equity, social justice and federalism. Wants that high offices in government be confined to natural born citizens of the country. A major party in Maharashtra and has a significant presence in Meghalaya, Manipur and Assam. A coalition partner in the state of Maharashtra in alliance with the Congress. Since 2004, a member of the United Progressive Alliance.

### State parties

Other than these six parties, most of the major parties of the country are classified by the Election Commission as 'State parties'. These are commonly referred to as regional parties. Yet these parties need not be regional in their ideology or outlook. Some of these parties are all India parties that happen to have succeeded only in some states. Parties like the Samajwadi Party, Samata Party and Rashtriya Janata Dal have national level political organisation with units in several states. Some of these parties like Biju Janata Dal, Sikkim Democratic Front and Mizo National Front are conscious about their State identity.

Over the last three decades, the number and strength of these parties has expanded. This made the Parliament of India politically more and more diverse. No one national party is able to secure on its own a majority in Lok Sabha. As a result, the national parties are compelled to form alliances with State parties. Since



1996, nearly every one of the State parties has got an opportunity to be a part of one or the other national level coalition government. This has contributed to the strengthening of federalism and democracy in our country. (See the map on the next page for details of these parties).

### Challenges to political parties

We have seen how crucial political parties are for the working of democracy. Since parties are the most visible face of democracy, it is natural that people blame parties for whatever is wrong with the working of democracy. All over the world, people express strong dissatisfaction with the failure of political parties to perform their functions well. This is the case in our country too. Popular dissatisfaction and criticism has focussed on four problem areas in the working of political parties. Political parties need to face and overcome these challenges in order to remain effective instruments of democracy.

#### Berlusconi Puppet Theatre



*Berlusconi was the Prime Minister of Italy. He is also one of the top businessmen in Italy. He is the leader of the Forza Italia founded in 1993. His company owns TV channels, the most important publishing company, a foot ball club (AC Milan) and a bank. This cartoon was made during the last elections.*

The first challenge is **lack of internal democracy** within parties. All over the world there is a tendency in political parties towards the concentration of power in one or few leaders at the top. Parties do not keep membership registers, do not hold organisational meetings, and do not conduct internal elections regularly. Ordinary members of the party do not get sufficient information on what happens inside the party. *Why don't parties give enough tickets to women? Is that also due to lack of internal democracy?*

They do not have the means or the connections needed to influence the decisions. As a result the leaders assume greater power to make decisions in the name of the party. Since one or few leaders exercise paramount power in the party, those who disagree with the leadership find it difficult to continue in the party. More than loyalty to party principles and policies, personal loyalty to the leader becomes more important. The second challenge of dynastic succession is related to the first one. Since most political parties do not

practice open and transparent procedures for their functioning, there are very few ways for an ordinary worker to rise to the top in a party. Those who happen to be the leaders are in a position of unfair advantage to favour people close to them or even their family members. In many parties, the top positions are always controlled by members of one family. This is unfair to other members of that party. This is also bad for democracy, since people who do not have adequate experience or popular support come to occupy positions of power. This tendency is present in some measure all over the world, including in some of the older democracies.



*This cartoon was drawn during the Presidency of George Bush of the Republican Party in the USA. The party's symbol is elephant. The cartoon seems to suggest that the Corporate America controls all major institutions of the country.*

The third challenge is about the growing role of **money and muscle power** in parties, especially during elections. Since parties are focussed only on winning elections, they tend to use short-cuts to win elections. They tend to nominate those candidates who have or can raise lots of money. Rich people and companies who give funds to the parties tend to have influence on the policies and decisions of the party. In some cases, parties support criminals who can win elections. Democrats all over the world are worried about the increasing role of rich people and big companies in democratic politics.

The fourth challenge is that very often parties do not seem to offer a **meaningful choice** to the voters. In order to offer meaningful choice, parties must be significantly different. In recent years there has been a decline in the ideological differences among parties in most parts of the world. For example, the difference between the Labour Party and the Conservative Party in Britain is very little. They agree on more fundamental aspects but differ only in details on how policies are to be framed and implemented. In our country too, the differences among all the major parties on the economic policies have reduced. Those who want really different policies have no option available to them. Sometimes people cannot even elect very different leaders either, because the same set of leaders keep shifting from one party to another.

*Does this suggest that in democracies people contest elections only to make money? But isn't it true that there are politicians committed to the well-being of the people?*

### How can parties be reformed?

In order to face these challenges, political parties need to be reformed. The question is: Are political parties



willing to reform? If they are willing, what has prevented them from reforming so far? If they are not willing, is it possible to force them to reform? Citizens all over the world face this question. This is not a simple question to answer. In a democracy, the final decision is made by leaders who represent political parties. People can replace them, but only by another set of party leaders. If all of them do not wish to reform, how can anyone force them to change?

Let us look at some of the recent efforts and suggestions in our country to reform political parties and its leaders:

- The Constitution was amended to prevent elected MLAs and MPs from changing parties. This was done because many elected representatives were indulging in defection in order to become ministers or for cash rewards. Now the law says that if any MLA or MP changes parties, he or she will lose the seat in the legislature. This new law has helped bring defection down. At the same time this has made any dissent even more difficult. MPs and MLAs have to accept whatever the party leaders decide.

**Defection:** Changing party allegiance from the party on which a person got elected (to a legislative body) to a different party.

*Do you agree that this form of reforming political parties will be acceptable to them?*

The Supreme Court passed an order to reduce the influence of money and criminals. Now, it is mandatory for every candidate who contests elections to file an affidavit giving details of his property and criminal cases pending against him. The new system has made a lot of information available to the public. But there is no system of check if the information given by the candidates is true. As yet we do not know if it has led to decline in the influence of the rich and the criminals. The Election Commission passed an order making it necessary for political parties to hold their organisational elections and file their income tax returns. The parties have started doing so but sometimes it is mere formality. It is not clear if this step has led to greater internal democracy in political parties. Besides these, many suggestions are often made to reform political parties:

A law should be made to regulate the internal affairs of political parties. It should be made compulsory for political parties to maintain a register of its members, to follow its own constitution, to have an independent authority, to act as a judge in case of party disputes, to hold open elections to the highest posts.

It should be made mandatory for political parties to give a minimum number of tickets, about one-third, to women candidates. Similarly, there should be a quota for women in the decision making bodies of the party. There should be state funding of elections. The government should give parties money to support their election expenses. This support could be given in kind: petrol, paper, telephone etc. Or it could be given in cash on the basis of the votes secured by the party in the last election.

**Affidavit:** A signed document submitted to an officer, where a person makes a sworn statement regarding her personal information. These suggestions have not yet been accepted by political parties. If and when these are accepted these could lead to some improvement. But we must be very careful about legal solutions to political problems. Over-regulation of political parties can be counter-productive. This would force all parties to find ways to cheat the law. Besides, political parties will not agree to pass a law that they do not like.

There are two other ways in which political parties can be reformed. One, people can put pressure on political parties. This can be done through petitions, publicity and agitations. Ordinary citizens, pressure groups and movements and the media can play an important role in this. If political parties feel that they would lose public support by not taking up reforms, they would become more serious about reforms. Two, political parties can improve if those who want this join political parties. The quality of democracy depends on the degree of public participation. It is difficult to reform politics if ordinary citizens do not take part in it and simply criticise it from the outside. The problem of bad politics can be solved by more and better politics. We shall return to this theme in the final chapter.

**Important Terms** **Coalition government:** A coalition government is generally formed in a multi-party system, when no single party wins a majority of seats then many parties get together based on compromise and tolerance. **Proportion of Participation:** Level of participation in the activities of the parties—very high in India. Advanced countries like Canada, Japan, Spain and South Korea—much less. The proportion of people in India who feel close to a political party is very high—membership of political parties has also gone up. **National party:** A party that secures at least 6% of the total votes in Lok Sabha elections or wins four seats in the Lok Sabha is recognized as a national party. **Regional party:** All parties, other than the six national parties, are classified as state parties by the Election Commission of India. They are also called regional parties. **Defection:** Changing party allegiance from the party on which a person got elected (to a legislative body) to a different party. **Affidavit:** A signed document submitted to an officer where a person makes a sworn statement regarding giving details of his property and criminal cases pending against him.

## Chapter 7 Outcomes Of Democracy

### Topic-1 How Do We Assess Democracy's Outcomes?

• **Is democracy a better form of government when compared with dictatorship or any other alternative? Democracy is better because**

- It promotes equality among citizens.
- It enhances the dignity of the individual.
- It improves the quality of decision-making.
- It provides a method to resolve conflicts.
- It allows room to correct mistakes.

• **Is the democratic government efficient? Is it effective?**

- Imagine that other form of government may take decisions very fast. But it may take decisions which are not accepted by the people and may therefore face problems.
- Democracy is based on the idea of deliberation and negotiation. So, some delay is bound to take place.
- In contrast, the democratic government will take more time to follow procedures before arriving at a decision.
- But because it has followed procedures, its decisions may be both more acceptable to the people and more effective.

• So, the cost of time that democracy pays is perhaps worth it.

• **Outcomes out of every democracy:**

- As a political outcome of democracy, we expect an accountable, responsive and legitimate government.
- As an economic outcome, we expect that democracies produce economic growth and development, and reduce poverty and inequality.
- As a social outcome, we expect democracy to

accommodate the social diversity in a society, and provide dignity and freedom to all citizens.

**Important Terms Dictatorship:** Under dictatorship all the powers are vested in a single person or in a group of people.

**Legitimate government:** Legally chosen government is called legitimate government. **Transparency:** To examine the process of decision making in a democracy.

### Topic-2 Political Outcomes

#### • Democracy is accountable, responsive and legitimate government

- Democracy ensures that decision making is based on norms and procedures. So, a citizen has the right and the means to examine the process of decision making. This is known as transparency. Democracy follows standard procedures and is accountable to the people.
- Democratic governments have a very good record when it comes to sharing information with citizens and much better than any non-democratic regime in this respect. Democracy is attentive to the needs and demands of the people and is largely free of corruption.
- There is one respect in which democratic government is certainly better than its alternatives. democratic government is a legitimate government. It may be slow, less efficient, not always very responsive or clean. But a democratic government is people's own government.

**Important Terms Accountable government:** The government elected by the people and therefore responsible to them. **Responsive government:** The government in which people have the right to know the process of decision-making. Know the Link [www.slideshare.net/.../outcomes-of-democracy](http://www.slideshare.net/.../outcomes-of-democracy)

### Topic-3 Economic Outcomes

#### • Economic growth and development

- Economic development depends on several factors: country's population size, global situation, cooperation from other countries, economic priorities adopted by the country, etc.
- However, the difference in the rates of economic development between less developed countries with dictatorships and democracies is negligible.
- Overall, we cannot say that democracy is a guarantee of economic development. But we can expect democracy not to lag behind dictatorships in economic development.

#### • Democracy reduces economic inequality and poverty

- Democracies have growing economic inequalities. A small number of ultra-rich enjoy a lion share of wealth and those at the bottom of the society have very little to depend upon and find very difficult to meet their basic needs of life, such as food, clothing, house, education and health.
- Democratically elected governments address the question of poverty by making various welfare schemes to remove poverty.
- Democracies not only making welfare schemes but also give reservations for socially and economically backward people in jobs, elections and educational institutions.

**Important Terms Economic Development:** It is the development of economic wealth of countries, regions or communities for the well-being of their inhabitants.

**Dictatorship:** Dictatorship, form of government in which one person or a small group possesses absolute power without effective constitutional limitations. **Economic Inequality:** It is the difference found in various measures of economic well-being among individuals in a group, among groups in a population, or among countries.

### Topic-4 Social Outcomes

#### • Democracy accommodates of social diversity

- Democracies usually develop a procedure to

accommodate various social groups. This reduces the possibility of social tensions becoming explosive or violent.

- No society can fully and permanently resolves conflicts among different groups. But democracy is best to handle social differences, divisions and conflicts.

#### • But the example of Sri Lanka reminds us that a democracy must fulfil two conditions in order to achieve accommodation of social divisions:

- It is necessary to understand that democracy is not simply rule by majority opinion. The majority always needs to work with the minority so that governments function to represent the general view.
- It is also necessary that rule by majority does not become rule by majority community in terms of religion or race or linguistic group, etc. Rule by majority means rule by majority's choice.

#### • Democracy promotes dignity and freedom of the citizens

- Democracy stands much superior to any other form of government in promoting dignity and freedom of the individual by providing Fundamental Rights. Every individual wants to receive respect from fellow beings.
- The passion for respect and freedom are the basis of democracy. Democracies throughout the world have recognised this, at least in principle. This has been achieved in various degrees in various democracies.
- Take the case of dignity of women. Most societies across the world were historically male dominated societies.

- Long struggles by women have created some sensitivity today that respect to and equal treatment of women are necessary ingredients of a democratic society.

- Democracy in India has strengthened the claims of the disadvantaged and discriminated castes for equal status and equal opportunity.

#### • Conclusion:

- A democracy is always striving towards a better goal. People constantly demand more benefits in a democracy. There are always more expectations.
- People now look critically at the work of those who hold power, the rich. They express their dissatisfaction loudly. It shows they are no longer subjects but citizens of a democratic country.

**Important Terms Social diversity:** It is all of the ways that people within a single culture are set apart from each other. Elements of social diversity can include ethnicity, lifestyle, religion, language, tastes and preferences. **Social divisions:** When social differences amongst different communities' increases and one community are upper castes and lower castes becomes a social division as the dalits are generally poor and face injustice and discrimination.

#### Overview

As we begin to wind up our tour of democracy, it is time to move beyond our discussion of specific themes and ask a general set of questions: What does democracy do? Or, what outcomes can we reasonably expect of democracy? Also, does democracy fulfil these expectations in real life? We begin by thinking about how to assess the outcomes of democracy. After some clarity on how to think on this subject, we proceed to look at the expected and actual outcomes of democracy in various respects: quality of government, economic well-being, inequality, social differences and conflict and finally freedom and dignity. Our final verdict – positive but qualified – leads us to think about the challenges to democracy in the next and final chapter.

#### How do we assess democracy's outcomes?

Democracy is a better form of government when

compared with dictatorship or any other alternative. We felt that democracy was better because it:

1. Promotes equality among citizens;
2. Enhances the dignity of the individual;
3. Improves the quality of decision-making;
4. Provides a method to resolve conflicts; and
5. Allows room to correct mistakes.

Are these expectations realised under democracies?

When we talk to people around us, most of them support democracy against other alternatives, such as rule by a monarch or military or religious leaders. But not so many of them would be satisfied with the democracy in practice. So we face a dilemma: democracy is seen to be good in principle, but felt to be not so good in its practice. This dilemma invites us to think hard about the outcomes of democracy. Do we prefer democracy only for moral reasons? Or are there some prudential reasons to support democracy too?

*Is democracy all about coping with multiple pressures and accommodating diverse demands?*

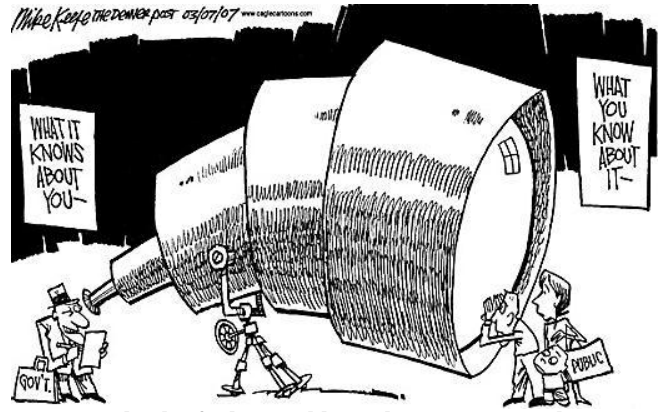
Over a hundred countries of the world today claim and practice some kind of democratic politics: they have formal constitutions, they hold elections, they have parties and they guarantee rights of citizens. While these features are common to most of them, these democracies are very much different from each other in terms of their social situations, their economic achievements and their cultures. Clearly, what may be achieved or not achieved under each of these democracies will be very different. But is there something that we can expect from every democracy, just because it is democracy?

Our interest in and fascination for democracy often pushes us into taking a position that democracy can address all socio-economic and political problems. If some of our expectations are not met, we start blaming the idea of democracy. Or, we start doubting if we are living in a democracy. The first step towards thinking carefully about the outcomes of democracy is to recognise that democracy is just a form of government. It can only create conditions for achieving something. The citizens have to take advantage of those conditions and achieve those goals. Let us examine some of the things we can reasonably expect from democracy and examine the record of democracy.

### **Accountable, responsive and legitimate government**

There are some things that democracy must provide. In a democracy, we are most concerned with ensuring that people will have the right to choose their rulers and people will have control over the rulers. Whenever possible and necessary, citizens should be able to participate in decision making, that affects them all. Therefore, the most basic outcome of democracy should be that it produces a government that is accountable to the citizens, and responsive to the needs and expectations of the citizens.

#### *Governmental Secrecy*



*Can you think of what and how the government knows about you and your family (for example ration cards and voter identity cards)? What are the sources of information for you about the government?*

Before we go into this question, we face another common question: Is the democratic government efficient? Is it effective? Some people think that democracy produces less effective government. It is, of course, true that non-democratic rulers do not have to bother about deliberation in assemblies or worry about majorities and public opinion. So, they can be very quick and efficient in decision making and implementation. Democracy is based on the idea of deliberation and negotiation. So, some delay is bound to take place. Does that make democratic government inefficient?

Let us think in terms of costs. Imagine a government that may take decisions very fast. But it may take decisions that are not accepted by the people and may therefore face problems. In contrast, the democratic government will take more time to follow procedures before arriving at a decision. But because it has followed procedures, its decisions may be both more acceptable to the people and more effective. So, the cost of time that democracy pays is perhaps worth it.

Now look at the other side – democracy ensures that decision making will be based on norms and procedures. So, a citizen who wants to know if a decision was taken through the correct procedures can find this out. She has the right and the means to examine the process of decision making. This is known as transparency. This factor is often missing from a non-democratic government. Therefore, when we are trying to find out the outcomes of democracy, it is right to expect democracy to produce a government that follows procedures and is accountable to the people. We can also expect that the democratic government develops mechanisms for citizens to hold the government accountable and mechanisms for citizens to take part in decision making whenever they think fit. If you wanted to measure democracies on the basis of this expected outcome, you would look for the following practices and institutions: regular, free and fair elections; open public debate on major policies and legislations; and citizens' right to information about the government and its functioning. The actual performance of democracies shows a mixed record on this. Democracies have had greater success in setting up regular and free elections and in setting up conditions for open public debate. But most democracies fall short of elections that provide a fair chance to everyone and in subjecting every decision to public debate. Democratic governments do not have a very good record when it comes to sharing information with citizens. All one can say in favour of democratic regimes



is that they are much better than any non-democratic regime in these respects.

In substantive terms it may be reasonable to expect from democracy a government that is attentive to the needs and demands of the people and is largely free of corruption. The record of democracies is not impressive on these two counts. Democracies often frustrate the needs of the people and often ignore the demands of a majority of its population. The routine tales of corruption are enough to convince us that democracy is not free of this evil. At the same time, there is nothing to show that non-democracies are less corrupt or more sensitive to the people.

There is one respect in which democratic government is certainly better than its alternatives: democratic government is legitimate government. It may be slow, less efficient, not always very responsive or clean. But a democratic government is people's own government. That is why there is an overwhelming support for the idea of democracy all over the world. As the accompanying evidence from South Asia shows, the support exists in countries with democratic regimes as well as countries without democratic regimes. People wish to be ruled by representatives elected by them. They also believe that democracy is suitable for their country. Democracy's ability to generate its own support is itself an outcome that cannot be ignored.

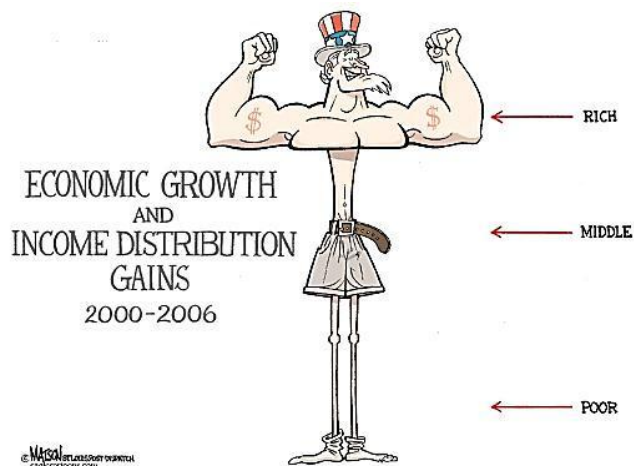
### Economic growth and development

If democracies are expected to produce good governments, then is it not fair to expect that they would also produce development? Evidence shows that in practice many democracies did not fulfil this expectation.

If you consider all democracies and all dictatorships for the fifty years between 1950 and 2000, dictatorships have slightly higher rate of economic growth. The inability of democracy to achieve higher economic development worries us. But this alone cannot be reason to reject democracy. As you have already studied in economics, economic development depends on several factors: country's population size, global situation, cooperation from other countries, economic priorities adopted by the country, etc. However, the difference in the rates of economic development between less developed countries with dictatorships and democracies is negligible. Overall, we cannot say that democracy is a guarantee of economic development. But we can expect democracy not to lag behind dictatorships in this respect.

When we find such significant difference in the rates of economic growth between countries under dictatorship and democracy, it is better to prefer democracy as it has several other positive outcomes.

### *The Rich Get Buff*



*Cartoon on this page and next three pages tell us about the disparities between the rich and poor. Should the gains of economic growth be evenly distributed? How can the poor get a voice for a better share in a nation? What can the poor countries do to receive a greater share in the world's wealth?*

### Economic outcomes of democracy

Arguments about democracy tend to be very passionate. This is how it should be, for democracy appeals to some of our deep values. These debates cannot be resolved in a simple manner. But some debates about democracy can and should be resolved by referring to some facts and figures. The debate about the economic outcomes of democracy is one such debate. Over the years many students of democracy have gathered careful evidence to see what the relationship of democracy with economic growth and economic inequalities is. The tables and the cartoon here present some of the evidences:

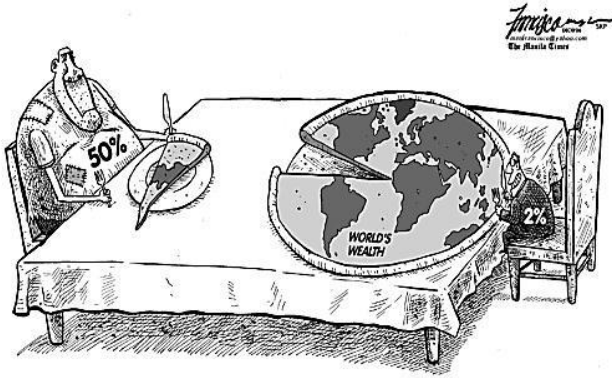
### Reduction of inequality and poverty

Perhaps more than development, it is reasonable to expect democracies to reduce economic disparities. Even when a country achieves economic growth, will wealth be distributed in such a way that all citizens of the country will have a share and lead a better life? Is economic growth in democracies accompanied by increased inequalities among the people? Or do democracies lead to a just distribution of goods and opportunities?

*Democracy is a rule of the majority. The poor are in majority. So democracy must be a rule of the poor. How can this not be the case?*

Democracies are based on political equality. All individuals have equal weight in electing representatives. Parallel to the process of bringing individuals into the political arena on an equal footing, we find growing economic inequalities. A small number of ultra-rich enjoy a highly disproportionate share of wealth and incomes. Not only that, their share in the total income of the country has been increasing. Those at the bottom of the society have very little to depend upon. Their incomes have been declining. Sometimes they find it difficult to meet their basic needs of life, such as food, clothing, house, education and health. In actual life, democracies do not appear to be very successful in reducing economic inequalities. The poor constitute a large proportion of our voters and no party will like to lose their votes. Yet democratically elected governments do not appear to be as keen to address the question of poverty as you would expect them to. The situation is much worse in some other countries. In Bangladesh, more than half of its population lives in

poverty. People in several poor countries are now dependent on the rich countries even for food supplies.  
*Voice of the poor*



### Accommodation of social diversity

Do democracies lead to peaceful and harmonious life among citizens? It will be a fair expectation that democracy should produce a harmonious social life. We have seen in the earlier chapters how democracies accommodate various social divisions. We saw in the first chapter how Belgium has successfully negotiated differences among ethnic populations. Democracies usually develop a procedure to conduct their competition. This reduces the possibility of these tensions becoming explosive or violent.

*All you are saying is that democracy ensures that people do not break each other's head. This is not harmony. Should we be happy about it?*

No society can fully and permanently resolve conflicts among different groups. But we can certainly learn to respect these differences and we can also evolve mechanisms to negotiate the differences. Democracy is best suited to produce this outcome. Non-democratic regimes often turn a blind eye to or suppress internal social differences. Ability to handle social differences, divisions and conflicts is thus a definite plus point of democratic regimes. But the example of Sri Lanka reminds us that a democracy must fulfil two conditions in order to achieve this outcome:

It is necessary to understand that democracy is not simply rule by majority opinion. The majority always needs to work with the minority so that governments function to represent the general view. Majority and minority opinions are not permanent.

It is also necessary that rule by majority does not become rule by majority community in terms of religion or race or linguistic group, etc. Rule by majority means that in case of every decision or in case of every election, different persons and groups may and can form a majority. Democracy remains democracy only as long as every citizen has a chance of being in majority at some point of time. If someone is barred from being in majority on the basis of birth, then the democratic rule ceases to be accommodative for that person or group.

### Dignity and freedom of the citizens

Democracy stands much superior to any other form of government in promoting dignity and freedom of the individual. Every individual wants to receive respect from fellow beings. Often conflicts arise among individuals because some feel that they are not treated with due respect. The passion for respect and freedom are the basis of democracy. Democracies throughout the world have recognised this, at least in principle. This has been achieved in various degrees in various democracies. For societies which have been built for

long on the basis of subordination and domination, it is not a simple matter to recognize that all individuals are equal.

Take the case of dignity of women. Most societies across the world were historically male dominated societies. Long struggles by women have created some sensitivity today that respect to and equal treatment of women are necessary ingredients of a democratic society. That does not mean that women are actually always treated with respect. But once the principle is recognised, it becomes easier for women to wage a struggle against what is now unacceptable legally and morally. In a non-democratic set up, this unacceptability would not have legal basis because the principle of individual freedom and dignity would not have the legal and moral force there. The same is true of caste inequalities. Democracy in India has strengthened the claims of the disadvantaged and discriminated castes for equal status and equal opportunity. There are instances still of caste-based inequalities and atrocities, but these lack the moral and legal foundations. Perhaps it is the recognition that makes ordinary citizens value their democratic rights.

*I am anxious about my board exams. But democracy has so many exams. And millions of examiners*

Expectations from democracy also function as the criteria for judging any democratic country. What is most distinctive about democracy is that its examination never gets over. As democracy passes one test, it produces another test. As people get some benefits of democracy, they ask for more and want to make democracy even better. That is why, when we ask people about the way democracy functions, they will always come up with more expectations, and many complaints. The fact that people are complaining is itself a testimony to the success of democracy: it shows that people have developed awareness and the ability to expect and to look critically at power holders and the high and the mighty. A public expression of dissatisfaction with democracy shows the success of the democratic project: it transforms people from the status of a subject into that of a citizen. Most individuals today believe that their vote makes a difference to the way the government is run and to their own self-interest.

**Important Terms Dictatorship:** Under dictatorship all the powers are vested in a single person or in a group of people.

**Legitimate government:** Legally chosen government is called legitimate government. **Transparency:** To examine the process of decision making in a democracy.

**Accountable government:** The government elected by the people and therefore responsible to them. **Responsive government:** The government in which people have the right to know the process of decision-making.

**Economic Inequality:** It is the difference found in various measures of economic well-being among individuals in a group, among groups in a population, or among countries. **Social diversity:** It is all of the ways that people within a single culture are set apart from each other.

Elements of social diversity can include ethnicity, lifestyle, religion, language, tastes and preferences. **Social divisions:** When social differences amongst different communities' increases and one community are upper castes and lower castes becomes a social division as the dalits are generally poor and face injustice and discrimination.

## Chapter 8 Challenges To Democracy

### Overview

This concluding chapter draws upon all that you have learnt in the last two years so as to address the fundamental questions of democratic politics: What are

the challenges that democracy faces in our country and elsewhere? What can be done to reform democratic politics? How can our democracy become more democratic in its practice and outcomes? This chapter does not answer these questions. It only makes some suggestions about the way in which we can approach the questions of challenges and reforms. It invites you to think on your own and come up with your own reading of the challenges, your recipe of how to overcome these and your own definition of democracy.

### Thinking about challenges

Different countries face different kinds of challenges. At least one fourth of the globe is still not under democratic government. The challenge for democracy in these parts of the world is very stark. These countries face the **foundational challenge** of making the transition to democracy and then instituting democratic government. This involves bringing down the existing non-democratic regime, keeping military away from controlling government and establishing a sovereign and functional state.

Most of the established democracies face the **challenge of expansion**. This involves applying the basic principle of democratic government across all the regions, different social groups and various institutions. Ensuring greater power to local governments, extension of federal principle to all the units of the federation, inclusion of women and minority groups, etc., falls under this challenge. This also means that less and less decisions should remain outside the arena of democratic control. Most countries including India and other democracies like the US face this challenge.

The third challenge of **deepening of democracy** is faced by every democracy in one form or another. This involves strengthening of the institutions and practices of democracy. This should happen in such a way that people can realise their expectations of democracy. But ordinary people have different expectations from democracy in different societies. Therefore, this challenge takes different meanings and paths in different parts of the world. In general terms, it usually means strengthening those institutions that help people's participation and control. This requires an attempt to bring down the control and influence of the rich and powerful people in making governmental decision.

### Different types of challenges

(i) Foundational challenge (ii) Challenge of expansion (iii) Challenge of deepening of democracy. The main challenge to democracy in India is the challenge of expansion. Decentralisation of powers and applying the basic principle of democratic government across all the regions, have been developed; but still more is to be done. Inclusion of women and minority groups is still a challenge. All the decisions should be in the arena of democratic control. To get this thing to be done and possess is a big challenge. **Some other challenges to democracy include:** (i) Constitutional design (ii) Federalism and its functions (iii) Elections (iv) Democratic rights.

### Thinking about political reforms

Each of these challenges is linked to the possibility of reforms. Let us think of some broad guidelines that can be kept in mind while devising ways and means for political reforms in India:

It is very tempting to think of legal ways of reforming politics, to think of new laws to ban undesirable things. But this temptation needs to be resisted. No doubt, law

has an important role to play in political reform.

Carefully devised changes in law can help to discourage wrong political practices and encourage good ones. But legal-constitutional changes by themselves cannot overcome challenges to democracy. This is like the rules of cricket. A change in rules for LBW decisions helped to reduce negative batting tactics. But no one would ever think that the quality of cricket could be improved mainly through changes in the rules. This is to be done mainly by the players, coaches and administrators. Similarly, democratic reforms are to be carried out mainly by political activists, parties, movements and politically conscious citizens. Any legal change must carefully look at what results it will have on politics. Sometimes the results may be counter-productive. For example, many states have banned people who have more than two children from contesting panchayat elections. This has resulted in denial of democratic opportunity to many poor and women, which was not intended. Generally, laws that seek to ban something are not very successful in politics. Laws that give political actors incentives to do good things have more chances of working. The best laws are those which empower people to carry out democratic reforms. The Right to Information Act is a good example of a law that empowers the people to find out what is happening in government and act as watchdogs of democracy. Such a law helps to control corruption and supplements the existing laws that banned corruption and imposed strict penalties.

Democratic reforms are to be brought about principally through political practice. Therefore, the main focus of political reforms should be on ways to strengthen democratic practice. As we discussed in the chapter on political parties, the most important concern should be to increase and improve the quality of political participation by ordinary citizens.

Any proposal for political reforms should think not only about what is a good solution but also about who will implement it and how. It is not very wise to think that the legislatures will pass legislations that go against the interest of all the political parties and MPs. But measures that rely on democratic movements, citizens' organisations and the media are likely to succeed.

### Redefining democracy

We began this tour of democracy last year with a minimal definition of democracy. Do you remember that? This is what Chapter 2 of your textbook said last year: democracy is a form of government in which the rulers are elected by the people. We then looked at many cases and expanded the definition slightly to add some qualifications:

the rulers elected by the people must take all the major decisions;  
elections must offer a choice and fair opportunity to the people to change the current rulers;  
this choice and opportunity should be available to all the people on an equal basis; and  
the exercise of this choice must lead to a government limited by basic rules of the constitution and citizens' rights.

You may have felt disappointed that the definition did not refer to any high ideals that we associate with democracy. But in operational terms, we deliberately started with a minimalist but clear definition of democracy. It allowed us to make a clear distinction between democratic and non-democratic regimes. You may have noticed that in the course of our discussions of various aspects of democratic



government and politics, we have gone beyond that definition:

We discussed democratic rights at length and noted that these rights are not limited to the right to vote, stand in elections and form political organisations. We discussed some social and economic rights that a democracy should offer to its citizens.

We have taken up power sharing as the spirit of democracy and discussed how power sharing between governments and social groups is necessary in a democracy. We saw how democracy cannot be the brute rule of majority and how a respect for minority voice is necessary for democracy.

Our discussion of democracy has gone beyond the government and its activities. We discussed how eliminating discrimination based on caste, religion and gender is important in a democracy.

Finally, we have had some discussion about some outcomes that one can expect from a democracy. In doing so, we have not gone against the definition of democracy offered last year. We began then with a definition of what is the minimum a country must have to be called a democracy. In the course of our discussion

we moved to the set of desirable conditions that a democracy should have. We have moved from the definition of democracy to the description of a good democracy.

How do we define a good democracy? What are its features? Which are the features a democracy must have to be called a good democracy? And what must not take place in a democracy if it is a good democracy? You decide that.

**Important Terms Challenge:** A challenge is a difficulty that carries within it an opportunity for progress. **Deepening of Democracy:** This involves strengthening of the institutions and practices of democracy by more people's participation and control. **Sovereignty:** It is the full right and power of a governing body over itself, without any interference from outside sources or bodies. **Democratic reforms:** It refers to institutional changes that aim to improve the quality of democracy that is practiced in the country and empower the citizens. **Incentives:** A supplemental reward that serves as a motivational device for a desired action or behaviour. **Government auditors:** considered a subset of internal auditors, and are employed by federal, state, and local agencies.

# NCERT Class 11

## Political Theory

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 Political Theory: An Introduction

- Human beings are unique. They possess reason and the ability to reflect on their actions.
- Political Theory systematically thinks about the values that inform political life – values such as freedom, equality and justice.
- The objective of political theory is to train citizens to think rationally about political questions and assess the political events of our time.
- It is unfortunate that politics has come to be associated with the pursuit of self-interest by any and every method.
- Politics is an important and integral part of any society.
- Politics, at one level, involves what governments do and how they relate to the aspirations of the people, at another level, it involves how people struggle and influence decision making.
- In the Indian Constitution, our Preamble enshrines freedom and equality; the chapter on Rights in the Indian Constitution abolishes Untouchability in any form; Gandhian principles find a place in Directive Principles.
- Political theory deals with the ideas and the principles that shape Constitutions, governments and social life in a systematic manner.
- The Fundamental rights guaranteed by our Constitution are continually being reinterpreted in response to new circumstances.
- The Right to Life has been interpreted by the Courts to include the Right to Livelihood.
- The Right to Information has been guaranteed through a new law.
- As our world changes, we may discover new dimensions of freedom as well as new threats to freedom. For instance, global communications technology is making it easier for activists to network with one another across the world for protecting tribal cultures of forests. But, it also enables terrorists and criminals to network.
- Political theorists clarify the meaning of political concepts by looking at how they are understood and used in ordinary language. They also debate and examine the diverse meanings and opinions in a systematic manner.
- Political theory is relevant for all the groups to act responsibly as a citizen, it is helpful to have a basic knowledge of the political ideas and institutions that shape the world we live in.
- It is crucial that we learn to be reasonable and informed if we are to participate in Gram Sabhas or offer our views on websites and polls.
- An educated and vigilant citizenry makes those, who play politics, more public-spirited.
- As students, we have opinions about what is right or wrong, just or unjust, but do not know whether they are

reasonable or not. Political Theory exposes us to systematic thinking on justice or equality so that we can polish our opinions and argue in an informed manner and for the sake of common interests.

**Important Terms Class** – A large group of people which is different from other groups of people. **Political Science** – Scientific study of different political ideas and principles. **Political Theory** – The study of a state from the philosophical and empirical point of view. **Politics** – The struggle for power to maintain relationship between power and authority.

#### Chapter 2 Freedom

- The autobiography of Nelson Mandela is titled ‘Long Walk to Freedom’. In this book, he talks about his personal struggle against the apartheid regime in South Africa, about the resistance of his people to the segregationist policies of the white regime, about the humiliations, hardships and police brutalities suffered by the black people of South Africa.
- Aung San Suu Kyi, in her book of essays bearing the title ‘Freedom from Fear’, states that living a ‘dignified human life’ requires us to be able to overcome fear.
- The term ‘Swaraj’ incorporates within it two words – Swa (Self) and Raj (Rule). It can be understood to mean both the rule of the self and rule over self.
- A simple answer to the question ‘what is freedom’ is absence of constraints.
- Freedom is also about expanding the ability of people to freely express themselves and develop their potential.
- To be free, a society must widen the area in which individuals, groups, communities or nations, will be able to charter their own destiny and be what they wish to be.
- Freedom allows the full development of the individual’s creativity, sensibilities and capabilities.
- We need some political and legal restraints to ensure that differences may be discussed and debated without one group coercively imposing its view on the other.
- Liberalism acknowledges a role for welfare state and accepts the need for measures to reduce both social and economic inequalities.
- It is the state which can constrain a person from acting in a way that causes harm to someone else.
- Constraining actions by the force of law should only happen when the other restraining actions cause serious harm to definite individuals. Otherwise society must bear the inconvenience in the spirit of protecting freedom.
- Hate campaigns cause serious harm to the freedom of others and actions that cause serious harm are actions on which constraints can be imposed.
- We must make sure that the constraints imposed are not so severe that they destroy freedom itself.
- We must not develop a habit of imposing restrictions since such a habit is detrimental to freedom.

- 'Negative Liberty' seeks to define and defend an area in which the individual would be inviolable, in which he or she could 'do, be or become' whatever he or she wished to 'do, be or become'.
- 'Positive Liberty' is concerned with explaining the idea of 'freedom to'. It is in response to the answer 'who governs me?' to which the ideal answer is "I govern myself".
- One of the issues that is considered to belong to the minimum area of non-interference' is the freedom of expression.
- Freedom of expression is a fundamental value and for that society must be willing to bear some inconvenience to protect it from people who want to restrict it.
- Voltaire stated – "I disapprove of what you say but I will defend to death your right to say it."
- Banning is an easy solution for the short term since it meets the immediate demand but is very harmful for the long-term prospects of freedom in a society because once one begins to ban, then one develops a habit of banning.
- If we are not coerced into accepting the conditions, then we cannot claim that our freedom has been curtailed.

**Important Terms** **Apartheid** – Racial discrimination between the Whites and the Blacks practiced mainly after the end of the World War II. **Economic liberty** – Ensuring earning opportunities to citizens and incorporation of minimum wages in the society. **Freedom** – A situation that limits the constraints on individuals and allows them to expand their ability and reach their potential. **Freedom of expression** – The freedom to express one's views through speech, writing etc. **Legal liberty** – The freedom enjoyed by a country to draft and enforce its own Constitution and govern the country in accordance with the provisions of that Constitution. **Natural liberty** – The right of a person to be born free. **Personal liberty** – The freedom in individual matters like marriage, food etc. **Political liberty** – The freedom to choose representatives, contest elections and participate in government. **Religious liberty** – The freedom to follow and spread any religion without state interference except in some special circumstances.

### Chapter 3 Equality

- Equality is a powerful moral and political ideal that has inspired and guided human society for many centuries.
- The concept of equality invokes the idea that all human beings have an equal worth regardless of their colour, gender, race or nationality.
- It is inequality rather than equality which is most visible around us in the world as well as within our own society.
- We face a paradox – almost everyone accepts the ideal of equality, yet almost everywhere we encounter inequality.
- When people are treated differently just because they are born in a particular religion or race or caste or gender, we regard it as an unacceptable form of inequality.
- The treatment we receive and the opportunities we enjoy must not be predetermined by birth or social circumstances.
- The concept of equality implies that all people, as human beings, are entitled to the same rights and opportunities to develop their skills and talents, and to pursue their goals and ambitions.
- It is not the lack of equality of status or wealth or privilege that is significant but the inequalities in

people's access to such basic goods, as education, health care, safe housing, that make for an unequal and unjust society.

- It is difficult to use the natural / socially-produced distinction as a standard by which the laws and policies of a society can be assessed.

• The three dimensions of equality are: • **Political Equality** – It includes granting equal citizenship to all members of the state like freedom of expression, movement, association and belief. It includes legal rights guaranteed by the Constitution and the laws. A demand is often made for equal opportunities. • **Social Equality** – It guarantees certain minimum conditions of life to all the members of the society – adequate health care, the opportunity for good education, adequate nourishment and a minimum wage. The state should make policies to prevent discrimination or harassment of women in public places or employment, to provide incentives to open up education or certain professions to women. • **Economic Equality** – It exists in a society if there are significant differences in wealth, property or income between individuals or classes.

• Marx was an important nineteenth century thinker who argued that the root cause of economic inequality was private ownership of important economic resources. He stated that to tackle inequality in society, try and ensure public control over essential resources and forms of property.

• Liberals uphold the principle of competition as the most efficient and fair way of distributing resources and rewards in society.

• Socialist thinker Ram Manohar Lohia identified five kinds of inequalities that need to be fought against simultaneously: inequality between man and woman, inequality based on skin colour, caste based inequality, colonial rule of some countries over others and economic inequality.

• The first step towards bringing about equality is ending the formal system of inequality and privileges.

• The Constitution of India prohibits discrimination on grounds of religion, race, caste, sex, or place of birth and abolishes the practice of Untouchability.

• Sometimes, it is necessary to treat people differently in order to ensure that they can enjoy equal rights. Disabled people may justifiably demand special ramps in public spaces. These should not be seen as infringements of equality but as enhancement of equality.

• Affirmative Action is based on the idea that it is not sufficient to establish formal equality by law. It is necessary to take some more positive measures to minimize and eliminate entrenched forms of social inequalities. Example for this can be policy of quotas or reserved seats in education and jobs.

• Critics of positive discrimination contend that any provision of reservations or quotas for the deprived in admissions for higher education or jobs is unfair as it arbitrarily denies other sections of society their right to equal treatment. Reservations are a form of reverse discrimination.

• A distinction is made between treating everyone in an identical manner and treating everyone as equal.

• Women require special facilities in order to exercise right to work. They require some provision for maternity leave and crèches in the workplace.

**Important Terms** **Equality**: All people, as human beings, are entitled to the same rights and opportunities to develop their skills and talents, and to pursue their goals and ambitions. Feminism is a political doctrine of equal rights for women and



men. **Natural inequalities:** Inequalities that emerge between people as a result of their different capabilities and talents. Patriarchy refers to a social, cultural and economic system that values men more than women and gives men power over women. **Socially-produced inequalities:** Inequalities that emerge as a consequence of inequalities of opportunity or the exploitation of some groups in a society by others. Socialism refers to a set of political ideas that concerns about how to minimize existing inequality and distribute resources justly.

## Chapter 4 Social Justice

- Justice involves the well-being of all people.
- **Principles of Justice** • The principle of treating the equals equally requires that people should not be discriminated against on grounds of class, caste, race or gender. They should be judged on the basis of their work and actions and not on the basis of the group to which they belong. • Although people should get the same reward for the same work, it would be fair and just to reward different kinds of work differently if we take into account factors such as the effort required, the skills required, the possible dangers involved in that work etc. • The third principle of justice is for a society to take into account special needs of people while distributing rewards or duties. The principle of taking account of the special needs of people does not necessarily contradict the principle of equal treatment so much as extend it because the principle of treating equals equally could imply that people who are not equal in certain important respects could be treated differently.
- It becomes a function of governments to harmonise the different principles to promote a just society.
- Within a country, social justice would require not only that people be treated equally in terms of the laws and policies of the society but also that they enjoy some basic equality of life conditions and opportunities.
- John Rawls argues that the only way we can arrive at a fair and just rule is if we imagine ourselves to be in a situation in which we have to make decisions about how society should be organised although we do not know which position we would ourselves occupy in that society. He describes this as thinking under a 'veil of ignorance'. He expects that in such a situation, each will envisage the future society from the point of view of the worst-off.
- The merit of the 'veil of ignorance' position is that it expects people to just be their usual rational themselves, they are expected to think for themselves and choose what they regard to be in their interest – when they choose under the 'veil of ignorance' they will find that it is in their interest to think from the position of the worst-off.
- Rawls argues that rational thinking, not morality, could lead us to be fair and judge impartially regarding how to distribute the benefits and burdens of a society.
- A just society should provide people with the basic minimum conditions to enable them to live healthy and secure lives and develop their talents as well as equal opportunities to pursue their chosen goals in society.
- The basic amount of nourishment needed to remain healthy, housing, supply of clean drinking water, education and a minimum wage constitute an important part of the basic minimum conditions of life needed by the people.
- Supporters of the free market believe that if markets are left free of state interference, the sum of market

transactions would ensure overall a just distribution of benefits and duties in society. Those with merit and talent would be awarded accordingly while the incompetent would get a lesser reward.

- States could step in to ensure a basic minimum standard of living to all people so that they are able to compete on equal terms.
- The most efficient way of providing people with basic services might be to allow the development of markets in healthcare, education and similar other services. Private agencies should be encouraged to provide such services while state policies should try to empower people to buy those services.
- Free markets often exhibit a tendency to work in favour of the already privileged.
- To ensure social justice, the state should step in to see that basic facilities are made available to all the members of a society.
- In our own country, many kinds of social and economic inequalities exist and much remains to be done if they are to be reduced.

**Important Terms Economic Justice** – Providing an equal opportunity to the citizens to acquire their basic needs or livelihood. **Justice** – A means to distribute the due share to everybody. **Just Society** – A society in which ascending sense of reverence and descending sense of contempt is dissolved into the creation of compassionate society. **Moral Justice** – Natural principles of justice. **Protective Discrimination** – Steps taken by government for betterment of weaker sections of the society. **Social Justice** – All people living in a society are equal.

## Chapter 5 Rights

- There is a distinction between what I want and think I am entitled to, and what can be designated as rights.
- Rights are primarily those claims that we along with others, regard to be necessary for leading a life of respect and dignity.
- The grounds on which rights have been claimed are: • Source of self-respect and dignity • Necessary for our well-being
- In the seventeenth and eighteenth centuries, political theorists identified three natural rights of man: • Right to life • Right to liberty • Right to property All other rights were said to be derived from these basic rights.
- In recent years, the term human rights is being used more than the term natural rights.
- Rights are increasingly seen as guarantees that human beings themselves seek or arrive at in order to lead a minimally good life.
- Each of us possesses an intrinsic value, hence we must have equal opportunities to be free and realise our full potential.
- The United Nations' Universal Declaration of Human Rights (adopted and proclaimed on December 10, 1948) attempts to recognise those claims that the world community collectively sees as being important for leading a life of dignity and self-respect.
- The notion of universal human rights has been used by oppressed people all over the world to challenge laws which segregate them and deny them equal opportunities and rights.
- Constitutions represent the highest law of the land and so constitutional recognition of certain rights gives them a primary importance.
- Several theorists define rights as claims that are recognised by the state.
- Each right indicates what the state must do as well as

what it must not do.

- Our rights ensure that the authority of the state is exercised without violating the sanctity of the individual life and liberty.
- Political rights give to the citizens the right to equality before law and the right to participate in the political process. They include right to vote and elect representatives, the right to contest elections, the right to form political parties or join them.
- Civil liberties and political rights form the basis of a democratic system of government.
- Economic rights include citizens with low incomes receive housing and medical facilities from the state, unemployed persons receive a certain minimum wage, a rural employment guarantee scheme to help the poor.
- Cultural rights include right to have primary education in one's mother tongue, the right to establish institutions for teaching one's language and culture etc.
- Relation between Rights and Responsibilities: • Rights compel us to think not just of our own personal needs and interests but to defend some things as being good for all of us. • Rights require that I respect the rights of others. • We must balance our rights when they come into conflict. • Citizens must be vigilant about limitations which may be placed on their rights.

**Important Terms** **Civil liberties** – (The right to a free and a fair trial, the right to express one's views freely, the right to protest and express dissent). **Constitutional Rights** – (Facilities, opportunities and liberties provided by the state to the citizens). **Duty** – (An obligation by which, we are bound to do something). **Natural Rights** – (Facilities given to individuals by nature or God). **Right** – (An entitlement or a justified claim).

## Chapter 6 Citizenship

- No state is willing to grant membership to the refugees or illegal migrants. They are not guaranteed rights by any state and live in precarious conditions.
- The rights granted to citizens include: • Political rights like the right to vote • Civil rights like freedom of speech or belief • Socio-economic rights like right to a minimum wage, and right to education
- The purpose of the women's movement and the dalit movement is to change public opinion by drawing attention to their needs as well as to influence government policy to ensure them equal rights and opportunities.
- Citizenship is also about citizen-citizen relations and involves certain obligations of citizens to each other and to the society.
- Citizens are the inheritors and the trustees of the culture and natural resources of the country.
- Due to the right to freedom of movement, resistance builds up among the local people against so many jobs going to people from outside the area.
- The right to protest is an aspect of the freedom of expression guaranteed to citizens in our Constitution, provided that the protest does not harm the life or property of other people or the State.
- The courts may give a decision on the matter, or they may urge the government to address the issue.
- A basic principle of democracy is that disputes should be settled by negotiation and discussion rather than force.
- Equal rights for citizens need not mean that uniform policies have to be applied to all people since different groups of people may have different needs.

- The formal laws regarding citizenship only form the starting point and the interpretation of laws is constantly evolving.
- The concept of equal citizenship means that providing equal rights and protection to all citizens should be one of the guiding principles of government policies.
- Nation states claim that their boundaries define not just a territory but also a unique culture and shared history.
- The national identity is expressed through symbols like a flag, national anthem, national language, or certain ceremonial practices.
- India defines itself as a secular, democratic, nation state.
- The Indian Constitution attempts to provide full and equal citizenship to groups as different as the Scheduled Castes and Scheduled Tribes, many women who had not previously enjoyed equal rights, some remote communities in the Andaman and Nicobar Islands who had little contact with modern civilisation, and many others.
- The Republic Day parade in Delhi symbolises the attempt of the state to include people of different regions, cultures and religions.
- In India, citizenship can be acquired by birth, descent, registration, naturalisation, or inclusion of territory.
- The rights and obligations of citizens are listed in the Constitution.
- The state should not discriminate against citizens on the grounds of race/caste/sex/place of birth, or any of them.
- The rights of religious and linguistic minorities are also protected.
- People may be displaced by wars, persecution, famine, or other reasons. If no state is willing to accept them and they cannot return home, they become stateless peoples or refugees.
- The problem of stateless people is an important one confronting the world today.
- Supporters of global citizenship argue that although a world community and global society does not yet exist, we should try to strengthen this feeling and work towards the concept of global citizenship.
- The concept of national citizenship assumes that our state can provide us with the protection and rights which we need to live with dignity in the world today.
- Global citizenship might make it easier to deal with problems which extend across national boundaries and need cooperative action by the people and governments of many states.
- National citizenship might need to be supplemented by an awareness that we live in an interconnected world and that there is also a need for us to strengthen our links with people in different parts of the world.
- In 1950s, inequalities were maintained in southern states of the USA by a set of laws called Segregation Laws through which the black people were denied many civil and political rights. Martin Luther King Jr. was a black leader. He gave many arguments against the then prevailing laws: • In terms of self-worth and dignity, every human in the world is equal regardless of one's race or colour. • Segregation is like 'social leprosy' on the body politic. • The practice of segregation diminishes the quality of life for the white community also. • The Segregation Laws create artificial boundaries between people and prevent them from co-operating with each other for the overall benefit of the country.
- British sociologist, T. H. Marshall sees citizenship as involving three kinds of rights: • Civil rights protect the

individual's life, liberty and property. • Political rights enable the individual to participate in the process of governance. • Social rights give the individual access to education and employment.

• The Supreme Court of India gave an important decision regarding the rights of slum-dwellers in Bombay in response to a Public Interest Litigation filed by a social activist, Olga Tellis against Bombay Municipal Corporation in 1985. The petition claimed the right to live on pavements or in slums because there was no alternative accommodation available close to their place of work. If they were forced to move, they would lose their livelihood as well. The Supreme Court said, "Article 21 of the Constitution which guaranteed the right to life included the right to livelihood. Therefore, if pavement dwellers were to be evicted they should first be provided alternative accommodation under the right to shelter."

**Important Terms** **Citizenship** – Full and equal membership of a political community. **Equal citizenship** – Providing equal rights and protection to all citizens should be one of the guiding principles of government policies. **Equal/Full membership** – All citizens, rich or poor, should be guaranteed certain basic rights and a minimum standard of living by the state. **Natural born citizen** – One who is either born in the country or if one's parents are the citizens of a particular community.

## Chapter 7 Nationalism

- The Republic Day parade in Delhi is a striking symbol of Indian nationalism and it brings out the sense of power, strength, as well as diversity which many associate with the Indian nation.
- It is difficult to arrive at a precise and widely accepted definition of the term nationalism.
- Nationalism has passed through many phases: • It led to the unification of a number of small kingdoms into larger nation-states. • It contributed to the break-up of large empires.
- Some of the assumptions which people make about the nation: • **Shared beliefs** - A nation exists when its members believe that they belong together. • **History** - Nations perceive themselves as stretching back into the past as well as reaching into the future. • **Territory** – Nations identify with a particular territory. • **Shared Political Ideals** – Members of a nation share a vision of the kind of state they want to build. • **Common Political Identity** – A shared political vision about the state binds the individuals together as a nation.
- Nations seek the right to govern themselves and determine their future development.
- Re-organisation of state boundaries to satisfy the demands of one culture - one state, led to mass migration of population across state boundaries.
- There is a paradoxical situation of nation-states which themselves had achieved independence through struggle now acting against minorities within their own territories who claim the right to national self-determination.
- Every state in the world today faces the dilemma of how to deal with movements for self-determination.
- The solution does not lie in creating new states but in making existing states more democratic and equal.
- A nation-state which does not respect the rights and cultural identity of minorities within the state would find it difficult to gain the loyalty of its members.
- The Indian constitution has an elaborate set of

provisions for the protection of religious, linguistic and cultural minorities.

- In some states, identified communities also have the right to representation as a group in legislative bodies and other state institutions.
- The national identity has to be defined in an inclusive manner which can recognise the importance and unique contribution of all the cultural communities within the state.
- It is impossible as well as undesirable to grant independent statehood to every group that sees itself as a distinct cultural group.
- We should be careful not to allow identity claims to be lead to divisions and violence in the society.
- In a democracy, the political identity of citizen should encompass the different identities which people may have.

**Important Terms** **Nation**- An 'imagined' community, held together by the collective beliefs, aspirations and imaginations of its members. **Nationalism** – The right of self-determination to imply that every nation in the world should exercise a right to determine its destiny in all walks of life without interference of other states in the world. **State** – A group of people having sovereignty, living in a fixed territory under the control of an organised government.

## Chapter 8 Secularism

- The Constitution declares that every Indian citizen has a right to live with freedom and dignity in any part of the country.
- Secularism is first and foremost a doctrine that opposes all such forms of inter-religious domination.
- Secularism is not anti-religious.
- When religion is organised, it is taken over by its most conservative faction, which does not tolerate any dissent.
- Many religions fragment into sects which leads to frequent sectarian violence and persecution of dissenting minorities.
- As secularism is opposed to all forms of institutionalised religious domination, it challenges not merely inter-religious as well as intra-religious domination.
- Secularism is a normative doctrine which seeks to realise a secular society, i.e., one devoid of either inter-religious or intra-religious domination.
- It promotes freedom within religions, and equality between, as well as within religions.
- Education is one way of helping to change the mind set of people.
- A state must not be run by the heads of any particular religion.
- A state governed directly by a priestly order is called theocratic.
- To be truly secular, a state must not only refuse to be theocratic but also have no formal, legal alliance with any religion.
- A secular state must be committed to principles and goals which are partly derived from non-religious sources.
- **The Western Model Of Secularism** • The state will not intervene in the affairs of religion and, in the same manner, religion will not interfere in the affairs of the state. • No policy of the state can have an exclusively religious rationale. • The state can neither aid any religious institution nor can it hinder the activities of religious communities. • Religion is a private matter, not



a matter of state policy or law. • This form of secularism has no place for the idea of state-supported religious reform.

• **The Indian Model Of Secularism** • Indian secularism is fundamentally different from Western secularism. • Indian secularism took on a distinct form as a result of an interaction between what already existed in a society that had religious diversity and the ideas that came from the west. • Indian secularism equally opposed the oppression of dalits and women within Hinduism, the discrimination against women within Indian Islam or Christianity, and the possible threats that a majority community might pose to the rights of the minority religious communities. • Indian secularism deals not only with religious freedom of individuals but also with religious freedom of minority communities. • Indian secularism has made room for and is compatible with the idea of state-supported religious reform, bans Untouchability, abolishing child marriage and lifting the taboo on inter-caste marriage. • Indian State has adopted a very sophisticated policy in pursuit of religious equality. This allows it either to disengage with religion in American style, or engage with it if required. • The Indian state may engage with religion negatively to oppose religious tyranny. • The Indian Constitution grants all religious minorities the right to establish and maintain their own educational institutions which may receive assistance from the state. • The secular state does not have to treat every aspect of every religion with equal respect. It allows equal disrespect for some aspects of organised religions.

• **Criticisms Of Indian Secularism** • **Anti-religious** w It is argued that secularism is anti-religious. We have shown that secularism is against institutionalised religious domination. w It has been argued by some that secularism threatens religious identity. Actually, secularism promotes religious freedom and equality. •

**Western import** - Secularism is linked to Christianity, that it is western and therefore unsuited to Indian conditions. In reality, a secular state may keep a principled distance from religion to promote peace between communities and it may also intervene to protect the rights of specific communities. •

**Minoritism** - Indian secularism advocates minority rights. The actual position is that when it comes to fundamental interests, voting as a democratic procedure is inappropriate. The most fundamental interest of minorities must not be harmed and must be protected by constitutional law. Minority rights are justified as long as these rights protect their fundamental interests. Minority rights need not be nor should be viewed as special privileges. • **Interventionist** - Secularism is coercive and that it interferes excessively with the religious freedom of communities. Actually, Indian secularism follows the concept of principled distance which also allows for non-interference. The state must act as a facilitator by supporting liberal and democratic voices within every religion. • **Vote Bank Politics** -

Secularism encourages the politics of vote banks. If secular politicians who sought the votes of minorities also manage to give them what they want, then this is a success of the secular project. There is nothing wrong with vote bank politics as such, but only with a form of vote bank politics that generates injustice. • **Impossible Project** - Secularism cannot work because it tries to do too much. People with deep religious differences will never live together in peace. But, the history of Indian civilisation shows that this kind of living together is realisable.

**Important Terms** **Ahimsa** – Sanskrit word referring to adoption of the policy of non-violence against all. **Dharma** – Sanskrit word referring to adoption of religion along with the basic principle to do welfare of all. **Satya** – Sanskrit word referring to speaking of truth whatever the circumstances may be. **Secular** – A doctrine that implies respect for all religions. **Secularism** – State of separation of State and religion and to provide a theory of life and conduct as against one provided by the religion.

## Chapter 9 Peace

- Peace occupied a central place in the original teachings of almost all religions.
- Humanity has learnt to value peace after paying a huge price for its absence.
- Today, life is more insecure than ever before as people everywhere face a growing threat from terrorism.
- Peace is often defined as the absence of war. The definition is simple but misleading.
- **Forms of Structural Violence** • The traditional caste system treated certain groups of people as asprishya or untouchable. It was outlawed by the Constitution of independent India. • Patriarchy entails a form of social organisation that results in the systematic subordination of, and discrimination against, women. • Colonialism is prolonged and direct subjection of a people to alien rule.
- Racism and Communalism involve the stigmatisation and oppression of an entire racial group or community.
- The psychological and tangible harm suffered by the victims of violence often creates grievances that persist over generations.
- A just and lasting peace can be attained only by articulating and removing the latent grievances and causes of conflict through a process of dialogue.
- The Constitution of the United Nations Educational, Scientific and Cultural Organisation observes: “Since wars begin in the minds of men, it is in the minds of men that the defenses of peace must be constructed”.
- Peace, as the harmonious coexistence of contented people, would be a product of a society. It can never be achieved once and for all.
- Peace is not an end-state, but a process involving an active pursuit of the moral and material resources needed to establish human welfare.
- Pacifists, who consider peace to be a supreme value, take a moral stand against the use of violence even for attaining just ends.
- The long-term solution of peace lies in making the state more accountable through meaningful democratisation and reining it in via an effective system of civil liberties.
- **Different approaches to the pursuit of peace:** • The first approach accords centrality to states, respects their sovereignty, and treats competition among them as a fact of life. • It stresses the positive presence and possibilities of interdependence. It underscores the growing social and economic co-operation among nations. • The third considers the state system to be a passing phase of human history. It envisages the emergence of a supra-national order and sees the fostering of a global community as the surest guarantee of peace.
- Pacifism preaches opposition to war or violence as a means of settling disputes.
- UNO has not succeeded in preventing and eliminating threats to peace.
- Terrorists currently pose a great threat to peace

through an adroit and ruthless use of modern weapons and advanced technology.

- After World War II, countries like Japan and Costa Rica decided not to maintain military forces.
- The disintegration of the USSR in 1991 put a full stop to the era of military (especially nuclear) rivalry between the super powers and removed a major threat to international security.
- Peace movements are numerous popular initiatives aimed at fostering peace.
- The movement is sustained by people from diverse walks of life and includes workers, writers, scientists, teachers, media persons, etc.
- The movement has also created a body of knowledge called Peace Studies and effectively used new channels of communication such as the internet.

**Important Terms** **Armed race** – The competition that emerged among the nations after the World War II to develop a stock of weapons including nuclear weapons to become more and more powerful. **Disarmament** – It refers to stop manufacturing and storage of deadly war weapons. **Non-Alignment** – The foreign policy of a country to not belong to any block and take independent position on international issues. **Pacifism** – A theory that preaches opposition to war or violence as a means of settling disputes and that war or violence of any form of coercion is morally wrong. **Peace** – A situation of non-violence as well as to live in society and to work smoothly.

## Chapter 10 Development

- The leaders can either concentrate on implementing plans regardless of protests or they can proceed democratically, carrying the people with them.
- Development conveys the ideas of improvement, progress, well-being and an aspiration for a better life.
- In a narrower sense, development refers to more limited goals such as increasing the rate of economic growth, or modernising the society.
- In the initial years, developing countries adopted goals like faster economic growth through industrialisation, modernisation of agriculture and extending and modernising education.
- In India, a series of Five Year Plans for development were made starting from the 1950s.
- It was hoped that the emerging prosperity would gradually 'trickle down' to the poorest sections of society and help to reduce inequality.
- Critics of development have pointed out that the kind of development models which have been adopted in many countries has proved very costly for the developing countries.
- **The Social Costs of Development:** • A large number of people have been displaced from their homes and localities due to the construction of big dams, industrial activities and mining activities. • 'Narmada Bachao Andolan' is a movement against the Sardar Sarovar Dam. The supporters of this big dam claim that it will generate electricity, help irrigate large areas of land and also provide drinking water to the desert areas of Kutch and Saurashtra. The opponents claim that almost one million people have been displaced. Some even argue that the dam would greatly upset the ecological balance submerging large tracts of forests.
- **The Environmental Costs of Development:** • Global warming - The ice in the Arctic and Antarctica is melting because of increased emission of green house gases into the atmosphere • Air pollution is already a problem which does not discriminate between the rich

and the poor. • Loss of forests affects the poor who use forest resources for a variety of subsistence needs like firewood, medicinal herbs or food. • Drying up of rivers and ponds and falling ground water levels means that women have to walk longer in order to procure water. • Inequalities have not been seriously reduced and poverty continues to be a problem in the developing world.

- When economic growth and redistribution do not go together the benefits are likely to be cornered by those who are already privileged.
- When economic growth and redistribution do not go together the benefits are likely to be cornered by those who are already privileged.
- Measuring the rate of economic growth alone would be an inadequate and at times misleading indicator of development.

• An alternative way of measuring development is Human Development Report which is annually brought out by the United Nations Development Programme (UNDP). This measure is called the Human Development Index. According to this conception development should be a process which allows more and more people to make meaningful choices and the pre-condition for this is the fulfilment of basic needs like food, education, health and shelter.

• Development became a process designed and implemented by the ruling sections in the country who have also often been the major beneficiaries of development projects.

- The crucial issue is to whom do natural resources belong? Is it the local community, the state concerned, or are they a common resource of all humanity? If we understand resources as common to humanity then humanity would include future generations as well.
- The distinction between democracy and dictatorship is that in a democracy conflicts over resources, or different visions of the good life, are resolved through debate and a respect for the rights of all and these cannot be imposed from above.
- Both democracy and development are concerned with realising the common good.
- The "top-down" model of development views people as objects of development.
- A decentralised approach to development makes it possible to use various kinds of technologies — traditional and modern — in a creative manner.
- Efforts should be made to conserve natural resources and use renewable sources of energy as far as possible. For example, rain-water harvesting, solar and bio-gas plants, micro-hydel projects, compost pits to generate manure out of organic waste.
- There is also a need to scale down our need for non-renewable resources by changing life styles.

**Important Terms** **Democratic participation** – The right of people to participate in decision making of political affairs.

**Development (broader sense)** – The idea of improvement, progress, well-being and aspiration for better life to constitute the vision for society as a whole and how to achieve it.

**Development (narrower sense)** – More limited goals like increasing the rate of economic growth etc. **Modernisation** – A systematic process involving complementary change in the demographic, social, economic and political sectors of the society to increase material standard of living and subsidiary phenomenon. **Underdevelopment** – The condition of low level of living, productivity, income related to political, ecological and economic environment tending to result in low level of life.

# NCERT Class 11

## Constitution at Work

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 Constitution: Why And How?

After studying this chapter, you will learn:

- what a constitution means;
- what a constitution does to the society;
- how constitutions govern the allocation of power in society; and
- what was the way in which the Constitution of India was made.

#### Why Do We Need a Constitution?

What is a constitution? What are its functions? What role does it perform for a society? How does a constitution relate to our daily existence? Answering these questions is not as difficult as you might think.

#### Constitution allows coordination and assurance

Imagine society as a group of people with full of diversity, this group has to live together. They are dependent upon each other in various ways. They require the cooperation of each other. What will enable the group to live together peacefully?

One may say that perhaps members of a group can live together if they can agree on some basic rules. Why will the group need certain basic rules? Think of what would happen in the absence of some basic rules. Every individual would be insecure simply because they would not know what members of this group could do to each other, who could claim rights over what. Any group will need some basic rules that are publicly promulgated and known to all members of that group to achieve a minimal degree of coordination. But these rules must not only be known, they must also be enforceable. If citizens have no assurance that others will follow these rules, they will themselves have no reason to follow these rules. Saying that the rules are legally enforceable gives an assurance to everybody that others will follow these, for if they do not do so, they will be punished.

*The first function of a constitution is to provide a set of basic rules that allow for minimal coordination amongst members of a society.*

#### Specification of decision making powers

A constitution is a body of fundamental principles according to which a state is constituted or governed. But what should these fundamental rules be? And what makes them fundamental? It specifies the basic allocation of power in a society. It decides who gets to decide what the laws will be.

In the Indian Constitution for example, it is specified that in most instances, Parliament gets to decide laws and policies, and that Parliament itself be organised in a particular manner. Before identifying what the law in any given society is, you have to identify who has the authority to enact it. If Parliament has the authority to enact laws, there must be a law that bestows this

authority on Parliament in the first place. This is the function of the constitution. It is an authority that constitutes government in the first place.

*The second function of a constitution is to specify who has the power to make decisions in a society. It decides how the government will be constituted.*

#### Limitations on the powers of government

But this is clearly not enough. Suppose you decided who had the authority to make decisions. But then this authority passed laws that you thought were patently unfair. It prohibited you from practising your religion for instance. Or it enjoined that clothes of a certain colour were prohibited, or that you were not free to sing certain songs or that people who belonged to a particular group (caste or religion) would always have to serve others and would not be allowed to retain any property. Or that government could arbitrarily arrest someone, or that only people of a certain skin colour would be allowed to draw water from wells. You would obviously think these laws were unjust and unfair. And even though they were passed by a government that had come into existence based on certain procedures there would be something obviously unjust about that government enacting these laws.

*So the third function of a constitution is to set some limits on what a government can impose on its citizens. These limits are fundamental in the sense that government may never trespass them.*

Constitutions limit the power of government in many ways. The most common way of limiting the power of government is to specify certain fundamental rights that all of us possess as citizens and which no government can ever be allowed to violate. The exact content and interpretation of these rights varies from constitution to constitution. But most constitutions will protect a basic cluster of rights. Citizens will be protected from being arrested arbitrarily and for no reason. This is one basic limitation upon the power of government. Citizens will normally have the right to some basic liberties: to freedom of speech, freedom of conscience, freedom of association, freedom to conduct a trade or business etc. In practice, these rights can be limited during times of national emergency and the constitution specifies the circumstances under which these rights may be withdrawn.

#### Aspirations and goals of a society

Most of the older constitutions limited themselves largely to allocating decision-making power and setting some limits to government power. But many twentieth century constitutions, of which the Indian Constitution is the finest example, also provide an enabling framework for the government to do certain positive things, to express the aspirations and goals of society. The Indian Constitution was particularly innovative in this respect. Societies with deep entrenched inequalities of various kinds, will not only have to set limits on the power of government, they will also have to enable and



empower the government to take positive measures to overcome forms of inequality or deprivation. For example, India aspires to be a society that is free of caste discrimination. If this is our society's aspiration, the government will have to be enabled or empowered to take all the necessary steps to achieve this goal. In a country like South Africa, which had a deep history of racial discrimination, its new constitution had to enable the government to end racial discrimination. More positively, a constitution may enshrine the aspirations of a society. The framers of the Indian Constitution, for example, thought that each individual in society should have all that is necessary for them to lead a life of minimal dignity and social self-respect — minimum material well being, education etc. The Indian Constitution enables the government to take positive welfare measures some of which are legally enforceable. As we go on studying the Indian Constitution, we shall find that such enabling provisions have the support of the Preamble to our Constitution, and these provisions are found in the section on Fundamental Rights. The Directive Principles of State of Policy also enjoin government to fulfil certain aspirations of the people. *The fourth function of a constitution is to enable the government to fulfil the aspirations of a society and create conditions for a just society.*

### **Enabling provisions of the Constitution**

Constitutions are not only rules and regulations controlling the powers of the government. They also give powers to the government for pursuing collective good of the society.

- Constitution of South Africa assigns many responsibilities to the government: it wants the government to take measures to promote conservation of nature, make efforts to protect persons or groups subjected to unfair discrimination, and provides that the government must progressively ensure adequate housing to all, health care, etc.
- In the case of Indonesia also, the government is enjoined to establish and conduct national education system. The Indonesian Constitution ensures that the poor and destitute children will be looked after by the government.

### **Fundamental identity of a people**

Finally, and perhaps even most importantly, a constitution expresses the fundamental identity of a people. This means the people as a collective entity come into being only through the basic constitution. It is by agreeing to a basic set of norms about how one should be governed, and who should be governed that one forms a collective identity. One has many sets of identities that exist prior to a constitution. But by agreeing to certain basic norms and principles one constitutes one's basic political identity. Second, constitutional norms are the overarching framework within which one pursues individual aspirations, goals and freedoms. The constitution sets authoritative constraints upon what one may or may not do. It defines the fundamental values that we may not trespass. So the constitution also gives one a moral identity. Third and finally, it may be the case that many basic political and moral values are now shared across different constitutional traditions.

### **The Authority of a Constitution**

We have outlined some of the functions a constitution performs. These functions explain why most societies have a constitution. But there are three further questions we can ask about constitutions:

- a) What is a constitution?
- b) How effective is a constitution?
- c) Is a constitution just?

In most countries, 'Constitution' is a compact document that comprises a number of articles about the state, specifying how the state is to be constituted and what norms it should follow. When we ask for the constitution of a country we are usually referring to this document. But some countries, the United Kingdom for instance, do not have one single document that can be called the Constitution. Rather they have a series of documents and decisions that, taken collectively, are referred to as the constitution. So, we can say that constitution is the document or set of documents that seeks to perform the functions that we mentioned above.

But many constitutions around the world exist only on paper; they are mere words existing on a parchment. The crucial question is: how effective is a constitution? What makes it effective? What ensures that it has a real impact on the lives of people? Making a constitution effective depends upon many factors.

### **Mode of promulgation**

This refers to how a constitution comes into being. Who crafted the constitution and how much authority did they have? In many countries constitutions remain defunct because they are crafted by military leaders or leaders who are not popular and do not have the ability to carry the people with them. The most successful constitutions, like India, South Africa and the United States, are constitutions which were created in the aftermath of popular national movements. Although India's Constitution was formally created by a Constituent Assembly between December 1946 and November 1949, it drew upon a long history of the nationalist movement that had a remarkable ability to take along different sections of Indian society together. The Constitution drew enormous legitimacy from the fact that it was drawn up by people who enjoyed immense public credibility, who had the capacity to negotiate and command the respect of a wide cross-section of society, and who were able to convince the people that the constitution was not an instrument for the aggrandisement of their personal power. The final document reflected the broad national consensus at the time.

Some countries have subjected their constitution to a full-fledged referendum, where all the people vote on the desirability of a constitution. The Indian Constitution was never subject to such a referendum, but nevertheless carried enormous public authority, because it had the consensus and backing of leaders who were themselves popular. Although the Constitution itself was not subjected to a referendum, the people adopted it as their own by abiding by its provisions. Therefore, the authority of people who enact the constitution helps determine in part its prospects for success.

### **The substantive provisions of a constitution**

It is the hallmark of a successful constitution that it gives everyone in society some reason to go along with its provisions. A constitution that, for instance, allowed permanent majorities to oppress minority groups within society would give minorities no reason to go along with the provision of the constitution. Or a constitution that systematically privileged some members at the expense of others, or that systematically entrenched the power

of small groups in society, would cease to command allegiance. If any group feels their identity is being stifled, they will have no reason to abide by the constitution. No constitution by itself achieves perfect justice. But it has to convince people that it provides the framework for pursuing basic justice.

The more a constitution preserves the freedom and equality of all its members, the more likely it is to succeed. Does the Indian Constitution, broadly speaking, give everyone a reason to go along with its broad outlines? After studying this book, one should be able to answer this question in the affirmative.

### Balanced institutional design

Constitutions are often subverted, not by the people, but by small groups, who wish to enhance their own power. Well crafted constitutions fragment power in society intelligently so that no single group can subvert the constitution. One way of such intelligent designing of a constitution is to ensure that no single institution acquires monopoly of power. This is often done by fragmenting power across different institutions. The Indian Constitution, for example, horizontally fragments power across different institutions like the Legislature, Executive and the Judiciary and even independent statutory bodies like the Election Commission. This ensures that even if one institution wants to subvert the Constitution, others can check its transgressions. An intelligent system of checks and balances has facilitated the success of the Indian Constitution.

Another important aspect of intelligent institutional design is: that a constitution must strike the right balance between certain values, norms and procedures as authoritative, and at the same time allow enough flexibility in its operations to adapt to changing needs and circumstances. Too rigid a constitution is likely to break under the weight of change; a constitution that is, on the other hand, too flexible, will give no security, predictability or identity to a people. Successful constitutions strike the right balance between preserving core values and adapting them to new circumstances. You will notice the wisdom of makers of the Indian Constitution in the chapter on the Constitution as a living document (Chapter 9). The Indian Constitution is described as 'a living' document. By striking a balance between the possibility to change the provisions and the limits on such changes, the Constitution has ensured that it will survive as a document respected by people. This arrangement also ensures that no section or group can, on its own, subvert the Constitution.

Therefore in determining whether a constitution has authority you can ask yourself three questions:

- Were the people who enacted the constitution credible? This question will be answered in the remaining part of this chapter.
- Secondly, did the constitution ensure that power was intelligently organised so that it was not easy for any group to subvert the constitution? And, most importantly, does the constitution give everyone some reason to go along with it? Most of this book is about this question.
- Also, is the constitution the locus of people's hopes and aspiration? The ability of the constitution to command voluntary allegiance of the people depends to a certain extent upon whether the constitution is just. What are the principles of justice underlying the Indian Constitution? The last chapter of this book will answer this question.

### How was the Indian Constitution made?

Let us find out how the Indian Constitution was made. Formally, the Constitution was made by the Constituent Assembly which had been elected for undivided India. It held its first sitting on 9 December 1946 and re-assembled as Constituent Assembly for divided India on 14 August 1947. Its members were elected by indirect election by the members of the Provisional Legislative Assemblies that had been established in 1935. The Constituent Assembly was composed roughly along the lines suggested by the plan proposed by the committee of the British cabinet, known as the Cabinet Mission. According to this plan:

- Each Province and each Princely State or group of States were allotted seats proportional to their respective population roughly in the ratio of 1:10,00,000. As a result the Provinces (that were under direct British rule) were to elect 292 members while the Princely States were allotted a minimum of 93 seats.
  - The seats in each Province were distributed among the three main communities, Muslims, Sikhs and general, in proportion to their respective populations.
  - Members of each community in the Provisional Legislative Assembly elected their own representatives by the method of proportional representation with single transferable vote.
  - The method of selection in the case of representatives of Princely States was to be determined by consultation.
- Are the principles of liberty, equality and fraternity being practised in your classroom? How can they coexist? Discuss this with your friends.

The previous section discusses the three factors that make a constitution effective and respectable. How far does the Indian Constitution pass this test?

### Composition of the Constituent Assembly

As a consequence of the Partition under the plan of 3 June 1947 those members who were elected from territories which fell under Pakistan ceased to be members of the Constituent Assembly. The numbers in the Assembly were reduced to 299 of which 284 were actually present on 26 November 1949 and appended their signature to the Constitution as finally passed. The Constitution was thus framed against the backdrop of the horrendous violence that the Partition unleashed on the sub-continent. But it is a tribute to the fortitude of the framers that they were not only able to draft a constitution under immense pressure, but also learnt the right lessons from the unimaginable violence that accompanied Partition. The Constitution was committed to a new conception of citizenship, where not only would minorities be secure, but religious identity would have no bearing on citizenship rights. But this account of the composition of the Constituent Assembly that drafted the Constitution touches upon only the surface of how our Constitution was made. Although, the members of the Assembly were not elected by universal suffrage, there was a serious attempt to make the Assembly a representative body. Members of all religions were given representation under the scheme described above; in addition, the Assembly had twenty-six members from what were then known as the Scheduled Classes. In terms of political parties, the Congress dominated the Assembly occupying as many as eighty-two per cent of the seats in the assembly after the Partition. The Congress itself was such a diverse party that it managed to accommodate almost all shades of opinion within it.

### The Principle of Deliberation

The authority of the Constituent Assembly does not come only from the fact that it was broadly, though not perfectly, representative. It comes from the procedures it adopted to frame the Constitution and the values its members brought to their deliberations. While in any assembly that claims to be representative, it is desirable that diverse sections of society participate, it is equally important that they participate not only as representatives of their own identity or community. Each member deliberated upon the Constitution with the interests of the whole nation in mind. There were often disagreements amongst members, but few of these disagreements could be traced to members protecting their own interests.

There were legitimate differences of principle. And the differences were many: should India adopt a centralised or decentralised system of government? What should be the relations between the States and the centre? What should be the powers of the judiciary? Should the Constitution protect property rights? Almost every issue that lies at the foundation of a modern state was discussed with great sophistication. Only one provision of the Constitution was passed without virtually any debate: the introduction of universal suffrage (meaning that all citizens reaching a certain age, would be entitled to be voters irrespective of religion, caste, education, gender or income). So, while the members felt no need at all to discuss the issue of who should have the right to vote, every other matter was seriously discussed and debated. Nothing can be a better testament to the democratic commitment of this Assembly.

The Constitution drew its authority from the fact that members of the Constituent Assembly engaged in what one might call public reason. The members of the Assembly placed a great emphasis on discussion and reasoned argument. They did not simply advance their own interests, but gave principled reasons to other members for their positions. The very act of giving reasons to others makes you move away from simply a narrow consideration of your own interest because you have to give reasons to others to make them go along with your view point. The voluminous debates in the Constituent Assembly, where each clause of the Constitution was subjected to scrutiny and debate, is a tribute to public reason at its best. These debates deserved to be memorialised as one of the most significant chapters in the history of constitution making, equal in importance to the French and American revolutions.

### Procedures

The importance of public reason was emphasised in the mundane procedures of the Assembly as well. The Constituent Assembly had eight major Committees on different subjects. Usually, Jawaharlal Nehru, Rajendra Prasad, Sardar Patel, Maulana Azad or Ambedkar chaired these Committees. These were not men who agreed with each other on many things. Ambedkar had been a bitter critic of the Congress and Gandhi, accusing them of not doing enough for the upliftment of Scheduled Castes. Patel and Nehru disagreed on many issues. Nevertheless, they all worked together. Each Committee usually drafted particular provisions of the Constitution which were then subjected to debate by the entire Assembly. Usually an attempt was made to reach a consensus with the belief that provisions agreed to by all, would not be detrimental to any particular interests. Some provisions were subject to the vote. But in each instance every single argument, query or concern was responded to with great care and in

writing. The Assembly met for one hundred and sixty six days, spread over two years and eleven months. Its sessions were open to the press and the public alike.

### Inheritance of the nationalist movement

But no constitution is simply a product of the Assembly that produces it. An Assembly as diverse as the Constituent Assembly of India could not have functioned if there was no background consensus on the main principles the Constitution should enshrine. These principles were forged during the long struggle for freedom. In a way, the Constituent Assembly was giving concrete shape and form to the principles it had inherited from the nationalist movement. For decades preceding the promulgation of the Constitution, the nationalist movement had debated many questions that were relevant to the making of the constitution — the shape and form of government India should have, the values it should uphold, the inequalities it should overcome. Answers forged in those debates were given their final form in the Constitution.

Perhaps the best summary of the principles that the nationalist movement brought to the Constituent Assembly is the Objectives Resolution (the resolution that defined the aims of the Assembly) moved by Nehru in 1946. This resolution encapsulated the aspirations and values behind the Constitution. What the previous section terms as substantive provisions of the constitution is inspired by and summed up by the values incorporated in the Objectives Resolution. Based on this resolution, our Constitution gave institutional expression to these fundamental commitments: equality, liberty, democracy, sovereignty and a cosmopolitan identity. Thus, our Constitution is not merely a maze of rules and procedures, but a moral commitment to establish a government that will fulfil the many promises that the nationalist movement held before the people.

### Main points of the Objectives Resolution

- ✓ **India is an independent, sovereign, republic;**
- ✓ **India shall be a Union of erstwhile British Indian territories, Indian States, and other parts outside British India and Indian States as are willing to be a part of the Union;**
- ✓ **Territories forming the Union shall be autonomous units and exercise all powers and functions of the Government and administration, except those assigned to or vested in the Union;**
- ✓ **All powers and authority of sovereign and independent India and its constitution shall flow from the people;**
- ✓ **All people of India shall be guaranteed and secured social, economic and political justice; equality of status and opportunities and equality before law; and fundamental freedoms - of speech, expression, belief, faith, worship, vocation, association and action - subject to law and public morality;**
- ✓ **The minorities, backward and tribal areas, depressed and other backward classes shall be provided adequate safeguards;**
- ✓ **The territorial integrity of the Republic and its sovereign rights on land, sea and air shall be maintained according to justice and law of civilized nations;**

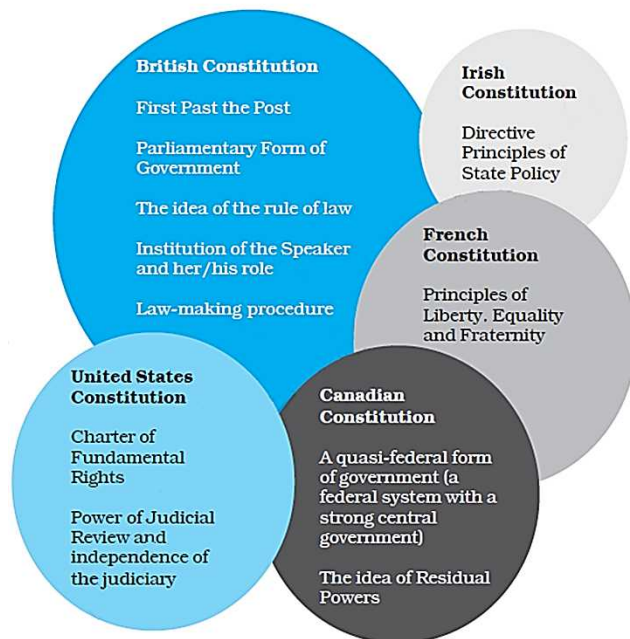


✓ **The land would make full and willing contribution to the promotion of world peace and welfare of mankind.**

### **Institutional arrangements**

The third factor ensuring effectiveness of a constitution is a balanced arrangement of the institutions of government. The basic principle is that government must be democratic and committed to the welfare of the people. The Constituent Assembly spent a lot of time on evolving the right balance among the various institutions like the executive, the legislature and the judiciary. This led to the adoption of the parliamentary form and the federal arrangement, which would distribute governmental powers between the legislature and the executive on the one hand and between the States and the central government on the other hand.

While evolving the most balanced governmental arrangements, the makers of our Constitution did not hesitate to learn from experiments and experiences of other countries. Thus, the framers of the Constitution were not averse to borrowing from other constitutional traditions. Indeed, it is a testament to their wide learning that they could lay their hands upon any intellectual argument, or historical example that was necessary for fulfilling the task at hand. So they borrowed a number of provisions from different countries.



### **Provisions borrowed from constitutions of different countries**

#### **Conclusion**

It is a tribute to the wisdom and foresight of the makers of the Constitution that they presented to the nation a document that enshrined fundamental values and highest aspirations shared by the people. This is one of the reasons why this most intricately crafted document has not only survived but become a living reality, when so many other constitutions have perished with the paper they were first written on.

India's Constitution is a unique document which in turn became an exemplar for many other constitutions, most notably South Africa. The main purpose behind the long search that went on for almost three years was to strike the right balance so that institutions created by the Constitution would not be haphazard or tentative arrangements but would be able to accommodate the aspirations of the people of India for a long time to come. You will know more about these arrangements

through the study of the remaining chapters in this book.

## **Chapter 2 Rights In The Indian Constitution**

- what are the various Fundamental Rights listed in the Constitution of India;
- how these rights are protected;
- what role the judiciary has played in protecting and interpreting these rights; and
- what is the difference between the Fundamental Rights and the Directive Principles of State Policy.

### **Bill of Rights**

A democracy must ensure that individuals have certain rights and that the government will always recognise these rights. Therefore it is often a practice in most democratic countries to list the rights of the citizens in the constitution itself. Such a list of rights mentioned and protected by the constitution is called the 'bill of rights'. A bill of rights prohibits government from thus acting against the rights of the individuals and ensures a remedy in case there is violation of these rights.

From whom does a constitution protect the rights of the individual? The rights of a person may be threatened by another person or private organisation. In such a situation, the individual would need the protection of the government. So, it is necessary that the government is bound to protect the rights of the individual. On the other hand, the organs of the government (the legislature, executive, bureaucracy or even the judiciary), in the course of their functioning, may violate the rights of the person.

### **Fundamental Rights in the Indian Constitution**

During our freedom struggle, the leaders of the freedom movement had realised the importance of rights and demanded that the British rulers should respect rights of the people. The Motilal Nehru committee had demanded a bill of rights as far back as in 1928. It was therefore, natural that when India became independent and the Constitution was being prepared, there were no two opinions on the inclusion and protection of rights in the Constitution. The Constitution listed the rights that would be specially protected and called them 'fundamental rights'.

The word fundamental suggests that these rights are so important that the Constitution has separately listed them and made special provisions for their protection. The Fundamental Rights are so important that the Constitution itself ensures that they are not violated by the government.

Fundamental Rights are different from other rights available to us. While ordinary legal rights are protected and enforced by ordinary law, Fundamental Rights are protected and guaranteed by the constitution of the country. Ordinary rights may be changed by the legislature by ordinary process of law making, but a fundamental right may only be changed by amending the Constitution itself. Besides this, no organ of the government can act in a manner that violates them. As we shall study below in this chapter, judiciary has the powers and responsibility to protect the fundamental rights from violations by actions of the government. Executive as well as legislative actions can be declared illegal by the judiciary if these violate the fundamental rights or restrict them in an unreasonable manner. However, fundamental rights are not absolute or unlimited rights. Government can put reasonable

restrictions on the exercise of our fundamental rights.

### **Right to equality**

Right to equality tries to do away with any kind of discriminations. It provides for equal access to public places like shops, hotels, places of entertainment, wells, bathing ghats and places of worship. There cannot be any discrimination in this access on the grounds only of religion, race, caste, sex, or place of birth. It also prohibits any discrimination in public employment on any of the above mentioned basis. This right is very important because our society did not practice equal access in the past.

The practice of untouchability is one of the crudest manifestations of inequality. This has been abolished under the right to equality. The same right also provides that the state shall confer no title on a person except those who excel themselves in military or academic field. Thus right to equality strives to make India a true democracy by ensuring a sense of equality of dignity and status among all its citizens.

Have you read the Preamble to our Constitution? How does it describe equality? You will find that the Preamble mentions two things about equality: equality of status and equality of opportunity. Equality of opportunity means that all sections of the society enjoy equal opportunities. But in a society where there are various kinds of social inequalities, what does equal opportunity mean? The Constitution clarifies that the government can implement special schemes and measures for improving the conditions of certain sections of society: children, women, and the socially and educationally backward classes. You may have heard about 'reservations' in jobs, and in admissions. You would have wondered why there are reservations if we follow the principle of equality.

**Article 16 (4): Nothing in this article shall prevent the State from making any provision for the reservation of appointments or posts in favour of any backward class of citizens which, in the opinion of the State, is not adequately represented in the services under the State.**

In fact Article 16(4) of the constitution explicitly clarifies that a policy like reservation will not be seen as a violation of right to equality. If you see the spirit of the Constitution, this is required for the fulfilment of the right to equality of opportunity.

Article 21: Protection of life and personal liberty—No person shall be deprived of his life or personal liberty except according to procedure established by law.

### **Right to Freedom**

Equality and freedom or liberty, are the two rights that are most essential to a democracy. It is not possible to think of the one without thinking of the other. Liberty means freedom of thought, expression and action. However it does not mean freedom to do anything that one desires or likes. If that were to be permitted then a large number of people will not be able to enjoy their freedom. Therefore, freedoms are defined in such a manner that every person will enjoy her freedom without threatening freedom of others and without endangering the law and order situation.

### **Right to life and personal liberty**

The foremost right among rights to freedom is the right to life and personal liberty. No citizen can be denied his or her life except by procedure as laid down under the law. Similarly no one can be denied his/her personal liberty. That means no one can be arrested without being told the grounds for such an arrest. If arrested, the

person has the right to defend himself by a lawyer of his choice. Also, it is mandatory for the police to take that person to the nearest magistrate within 24 hours. The magistrate, who is not part of the police, will decide whether the arrest is justified or not.

This right is not just confined to a guarantee against taking away of an individual's life but has wider application. Various judgments of Supreme Court have expanded the scope of this right. The Supreme Court has ruled that this right also includes right to live with human dignity, free from exploitation. The court has held that right to shelter and livelihood is also included in the right to life because no person can live without the means of living, that is, the means of livelihood.

### **Preventive detention**

Ordinarily, a person would be arrested after he or she has reportedly committed some offence. However there are exceptions to this. Sometimes a person can be arrested simply out of an apprehension that he or she is likely to engage in unlawful activity and imprisoned for some time without following the above mentioned procedure. This is known as preventive detention. It means that if the government feels that a person can be a threat to law and order or to the peace and security of the nation, it can detain or arrest that person. This preventive detention can be extended only for three months. After three months such a case is brought before an advisory board for review.

On the face of it, preventive detention looks like an effective tool in the hands of the government to deal with anti-social elements or subversives. But this provision has often been misused by the government. Many people think that there must be greater safeguards in this law so that it may not be misused against people for reasons other than that which are really justified. In fact, there is a clear tension between right to life and personal liberty and the provision for preventive detention.

### **Other freedoms**

You can see that under the right to freedom there are some other rights as well. These rights however are not absolute. Each of these is subject to restrictions imposed by the government.

For example right to freedom of speech and expression is subject to restrictions such as public order, peace and morality etc. Freedom to assemble too is to be exercised peacefully and without arms. The government may impose restrictions in certain areas declaring the assembly of five or more persons as unlawful. Such powers can be easily misused by the administration. The genuine protest against an act or policy of government by the people may be denied permission. However, if the people are aware and vigilant in regard to their rights and choose to protest against such acts of administration such misuse becomes rare. In the Constituent Assembly itself, some members had expressed their dissatisfaction about restrictions on rights.

### **Rights of accused**

Our Constitution ensures that persons accused of various offences would also get sufficient protection. We often tend to believe that anyone who is charged with some offence is guilty. However, no one is guilty unless the court has found that person guilty of an offence. It is also necessary that a person accused of any crime should get adequate opportunity to defend herself or himself. To ensure a fair trial in courts, the Constitution has provided three rights:

- no person would be punished for the same offence

more than once,

- no law shall declare any action as illegal from a backdate, and
- no person shall be asked to give evidence against himself or herself.

### Right against Exploitation

In our country there are millions of people who are underprivileged and deprived. They may be subjected to exploitation by their fellow human beings. One such form of exploitation in our country has been begar or forced labour without payment. Another closely related form of exploitation is buying and selling of human beings and using them as slaves. Both of these are prohibited under the Constitution. Forced labour was imposed by landlords, money lenders and other wealthy persons in the past. Some form of bonded labour still continues in the country, specially in brick kiln work. It has now been declared a crime and it is punishable. The Constitution also forbids employment of children below the age of 14 years in dangerous jobs like factories and mines. With child labour being made illegal and right to education becoming a fundamental right for children, this right against exploitation has become more meaningful.

### Right to Freedom of Religion

According to our Constitution, everyone enjoys the right to follow the religion of his or her choice. This freedom is considered as a hallmark of democracy. Historically, there were rulers and emperors in different parts of the world who did not allow residents of their countries to enjoy the right to freedom of religion. Persons following a religion different from that of the ruler were either persecuted or forced to convert to the official religion of the rulers. Therefore, democracy has always incorporated the freedom to follow the religion of one's choice as one of its basic principles.

### Freedom of faith and worship

In India, everyone is free to choose a religion and practice that religion. Freedom of religion also includes the freedom of conscience. This means that a person may choose any religion or may choose not to follow any religion. Freedom of religion includes the freedom to profess, follow and propagate any religion. Freedom of religion is subject to certain limitations. The government can impose restrictions on the practice of freedom of religion in order to protect public order, morality and health. This means that the freedom of religion is not an unlimited right. The government can interfere in religious matters for rooting out certain social evils. For example in the past, the government has taken steps banning practices like sati, bigamy or human sacrifice. Such restrictions cannot be opposed in the name of interference in right to freedom of religion. The limitations on the right to freedom of religion always produce tensions between followers of various religions and the government. When the government seeks to restrict some activities of any religious group, people of that religion feel that this is interference in their religion.

Freedom of religion becomes a matter of political controversy for yet another reason. The Constitution has guaranteed the right to propagate one's religion. This includes persuading people to convert from one religion to another. However, some people resent conversions on the ground that these are based on intimidation or inducement. The Constitution does not allow forcible conversions. It only gives us the right to spread information about our religion and thus attract

others to it.

### Equality of all religions

Being a country which is home to several religions, it is necessary that the government must extend equal treatment to different religions. Negatively, it means that government will not favour any particular religion. India does not have any official religion. We don't have to belong to any particular religion in order to be a prime minister or president or judge or any other public official. We have also seen that under the right to equality, there is a guarantee that government will not discriminate on the basis of religion in giving employment. The institutions run by the state will not preach any religion or give religious education nor will they favour persons of any religion. The objective of these provisions is to sustain and nurture the principle of secularism.

### Cultural and Educational Rights

When we talk of the Indian society, the image of diversity comes before our minds. India is not made up of a monolithic society. We are a society that has vast diversity. In such a society that is full of diversity, there would be social sections which are small in numbers compared to some other groups. If a group is in minority, will it have to adopt the culture of the majority?

Our Constitution believes that diversity is our strength. Therefore, one of the fundamental rights is the right of the minorities to maintain their culture. This minority status is not dependent only upon religion.

Linguistic and cultural minorities are also included in this provision. Minorities are groups that have common language or religion and in a particular part of the country or in the country as a whole, they are outnumbered by some other social section. Such communities have a culture, language and a script of their own, and have the right to conserve and develop these.

All minorities, religious or linguistic, can set up their own educational institutions. By doing so, they can preserve and develop their own culture. The government will not, while granting aid to educational institutions, discriminate against any educational institution on the basis that it is under the management of minority community.

### Right to Constitutional Remedies

One would agree that our Constitution contains a very impressive list of Fundamental Rights. But merely writing down a list of rights is not enough. There has to be a way through which they could be realised in practice and defended against any attack on these rights. Right to constitutional remedies is the means through which this is to be achieved. Dr. Ambedkar considered the right to constitutional remedies as 'heart and soul of the constitution'. It is so because this right gives a citizen the right to approach a High Court or the Supreme Court to get any of the fundamental rights restored in case of their violation. The Supreme Court and the High Courts can issue orders and give directives to the government for the enforcement of rights.

The courts can issue various special orders known as writs.

- **Habeas corpus:** A writ of habeas corpus means that the court orders that the arrested person should be presented before it. It can also order to set free an arrested person if the manner or grounds of arrest are not lawful or satisfactory.

- **Mandamus:** This writ is issued when the court finds



that a particular office holder is not doing legal duty and thereby is infringing on the right of an individual.

- **Prohibition:** This writ is issued by a higher court (High Court or Supreme Court) when a lower court has considered a case going beyond its jurisdiction.

- **Quo Warranto:** If the court finds that a person is holding office but is not entitled to hold that office, it issues the writ of quo warranto and restricts that person from acting as an office holder.

- **Certiorari:** Under this writ, the court orders a lower court or another authority to transfer a matter pending before it to the higher authority or court.

Apart from the judiciary, many other mechanisms have been created in later years for the protection of rights. You may have heard about the National Commission on Minorities, the National Commission on Women, the National Commission on Scheduled Castes, etc. These institutions protect the rights of women, minorities or Dalits. Besides, the National Human Rights Commission has also been established by law to protect the fundamental and other kinds of rights.

### National Human Rights Commission (NHRC)

The real test of the rights given by any constitution is in their actual implementation. The poor, illiterate and the deprived sections of the society must be able to exercise their rights. Independent organisations like the People's Union for Civil Liberties (PUCL) or People's Union for Democratic Rights (PUDR) have been working as watchdogs against the violations of rights. In this background, the government has established in 1993 an institution, the National Human Rights Commission. The National Human Rights Commission (NHRC) is composed of a former chief justice of the Supreme Court of India, a former judge of the Supreme Court, a former chief justice of a High Court and two other members who have knowledge and practical experience in matters relating to human rights. The Commission's functions include inquiry at its own initiative or on a petition presented to it by a victim into complaint of violation of human rights; visit to jails to study the condition of the inmates; undertaking and promoting research in the field of human rights, etc. The Commission receives complaints in thousands every year. These relate to custodial death, custodial rape, disappearances, police excesses, failure in taking action, indignity to women, etc. Its most significant intervention has been on disappeared youth in Punjab and investigation and trial of Gujarat riot cases where its intervention proved effective.

The Commission does not have the power of prosecution. It can merely make recommendations to the government or recommend to the courts to initiate proceedings based on the inquiry that it conducts.

### Directive Principles of State Policy

The makers of our Constitution knew that independent India was going to face many challenges. Foremost among these was the challenge to bring about equality and well-being of all citizens. They also thought that certain policy direction was required for handling these problems. At the same time, the Constitution did not want future governments to be bound by certain policy decisions.

Therefore, some guidelines were incorporated in the Constitution but they were not made legally enforceable: this means that if a government did not implement a particular guideline, we cannot go to the court asking the court to instruct the government to implement that policy. Thus, these guidelines are 'non-

justiciable' i.e., parts of the Constitution that cannot be enforced by the judiciary. Those who framed our Constitution thought that the moral force behind these guidelines would ensure that the government would take them seriously. Besides, they expected that the people would also hold the governments responsible for implementing these directives. So, a separate list of policy guidelines is included in the Constitution. The list of these guidelines is called the Directive Principles of State Policy.

What do the Directive Principles contain?

The chapter on Directive Principles lists mainly three things:

- the goals and objectives that we as a society should adopt;
  - certain rights that individuals should enjoy apart from the Fundamental Rights; and
  - certain policies that the government should adopt.
- You may get some idea of the vision of makers of our Constitution by looking at some of the Directive Principles shown below.

The governments from time to time tried to give effect to some Directive Principles of State Policy. They passed several zamindari abolition bills, nationalised banks, enacted numerous factory laws, fixed minimum wages, cottage and small industries were promoted and provisions for reservation for the uplift of the scheduled castes and scheduled tribes were made. Such efforts to give effect to the Directive Principles include the right to education, formation of panchayati raj institutions all over the country, partial right to work under employment guarantee programme and the mid-day meal scheme etc.

### Fundamental Duties of citizens

- In 1976, the 42nd amendment to the Constitution was passed. Among other things, this amendment inserted a list of Fundamental Duties of Citizens. In all, ten duties were enumerated. However, the Constitution does not say anything about enforcing these duties.
- As citizens, we must abide by the Constitution, defend our country, promote harmony among all citizens, protect the environment.
- However, it must be noted that our Constitution does not make the enjoyment of rights dependent or conditional upon fulfilment of duties. In this sense, the inclusion of fundamental duties has not changed the status of our fundamental rights.

### Relationship between Fundamental Rights and Directive Principles

It is possible to see both Fundamental Rights and Directive Principles as complementary to each other. Fundamental Rights restrain the government from doing certain things while Directive Principles exhort the government to do certain things. Fundamental Rights mainly protect the rights of individuals while directive principles ensure the well-being of the entire society. However, at times, when government intends to implement Directive Principles of State Policy, it can come in conflict with the Fundamental Rights of the citizen.

This problem arose when the government sought to pass laws to abolish zamindari system. These measures were opposed on the ground that they violated right to property. However, keeping in mind the societal needs that are greater than the individual interests, the government amended the Constitution to give effect to the Directive Principles of State Policy. This led to a long legal battle. The executive and the judiciary took

different positions. The government claimed that rights can be abridged for giving effect to Directive Principles. This argument assumed that rights were a hindrance to welfare of the people. On the other hand, the court held the view that Fundamental Rights were so important and sacred that they cannot be limited even for purposes of implementing Directive Principles.]

### Right to Property

Behind the controversy about the relationship between rights and directive principles, there was one important reason: in the Constitution, originally, there was a fundamental right to 'acquire, possess and maintain' property. But the Constitution made it clear that property could be taken away by the government for public welfare. Since 1950, government made many laws that limited this right to property. This right was at the centre of the long debate over the relationship between rights and directive principles. Finally, in 1973, the Supreme Court gave a decision that the right to property was not part of the basic structure of the Constitution and therefore, parliament had power to abridge this right by an amendment. In 1978, the 44th amendment to the Constitution removed the right to property from the list of Fundamental Rights and converted it into a simple legal right under article 300 A. What difference, do you think, this change of status makes to the right to property?

This generated another complicated debate. This related to the amendment of the Constitution. The government was saying that Parliament can amend any part of the Constitution. The court was saying that Parliament cannot make an amendment that violated Fundamental Rights. This controversy was settled by an important decision of the Supreme Court in Kesavananda Bharati case. In this case, the court said that there are certain basic features of the Constitution and these cannot be changed by Parliament. We shall discuss this in greater detail in Chapter 9 on 'Constitution as a Living Document'.

### Conclusion

In the writings of Jotirao Phuley (1827-1890), a radical social reformer from Maharashtra, we find one of the earliest expressions of the view that rights include both freedom and equality. During the national movement, this idea of rights was further sharpened and expanded to constitutional rights. Our Constitution reflected this long tradition and listed the fundamental rights. Since 1950, the judiciary has functioned as an important protector of rights.

Judicial interpretations have expanded the scope of rights in many respects. The government and administration of our country function within this overall framework. Rights enforce limitations on the functioning of the government and ensure democratic governance of the country.

## Chapter 3 Election And Representation

After reading this chapter, you would understand:

- different methods of election;
- the characteristics of the system of election adopted in our country;
- the importance of the provisions for free and fair elections; and
- the debate on electoral reforms.

### Elections and democracy

All the citizens cannot take direct part in making every decision. Therefore, representatives are elected by the people. The constitution of a democratic country lays down some basic rules about elections. The details are usually left to be worked out by laws passed by the legislatures. These basic rules are usually about

- Who is eligible to vote?
- Who is eligible to contest?
- Who is to supervise elections?
- How do the voters choose their representatives?
- How are the votes to be counted and representatives elected?

Like most democratic constitutions, the Constitution of India answers all these questions. As you can see, the first three questions are about ensuring that elections are free and fair and can thus be called democratic. The last two questions are about ensuring a fair representation. In this chapter you will consider both these aspects of the Constitutional provisions about elections.

### Election System in India

In India, we follow a special method of elections called the First Past the Post System or the Plurality System. Under this system: The entire country is divided into 543 constituencies (at present). Each constituency elects one representative. The candidate who secures the highest number of votes in that constituency is declared elected. The winning candidate need not secure a majority of the votes. This method is called the First Past the Post (FPTP) system. In the electoral race, the candidate who is ahead of others, who crosses the winning post first of all, is the winner. This method is also called the Plurality System. This is the method of election prescribed by the Constitution.

### Proportional Representation

Let us compare this to how elections take place in Israel that follows a very different system of elections. In Israel once the votes are counted, each party is allotted the share of seats in the parliament in proportion to its share of votes. Each party fills its quota of seats by picking those many of its nominees from a preference list that has been declared before the elections. This system of elections is called the Proportional Representation (PR) system. In this system a party gets the same proportion of seats as its proportion of votes.

In the PR system there could be two variations. In some countries, like Israel or Netherlands, the entire country is treated as one constituency and seats are allocated to each party according to its share of votes in the national election. The other method is when the country is divided into several multi-member constituencies as in Argentina and Portugal. Each party prepares a list of candidates for each constituency, depending on how many have to be elected from that constituency. In both these variations, voters exercise their preference for a party and not a candidate. The seats in a constituency are distributed on the basis of votes polled by a party. Thus, representatives from a constituency, would and do belong to different parties. In India, we have adopted PR system on a limited scale for indirect elections. The Constitution prescribes a third and complex variation of the PR system for the election of President, Vice President, and for the election to the Rajya Sabha and Vidhan Parishads.

### Comparison of FPTP and PR system of election

FPTP	PR
The country is divided into small geographical units	Large geographical areas are demarcated as

called constituencies or districts  
Every constituency elects one representative  
Voter votes for a candidate  
A party may get more seats than votes in the legislature  
Candidate who wins the election may not get majority (50%+1) votes  
Examples: U.K., India

constituencies. The entire country may be a single constituency  
More than one representative may be elected from one constituency  
Voter votes for the party  
Every party gets seats in the legislature in proportion to the percentage of votes that it gets  
Candidate who wins the elections gets majority of votes.  
Examples: Israel, Netherlands

### How does PR work in Rajya Sabha elections

A third variant of PR, the Single Transferable Vote system (STV), is followed for Rajya Sabha elections. Every State has a specific quota of seats in the Rajya Sabha. The members are elected by the respective State legislative assemblies. The voters are the MLAs in that State. Every voter is required to rank candidates according to her or his preference. To be declared the winner, a candidate must secure a minimum quota of votes, which is determined by a formula:

Formula =  $\left[ \frac{\text{Total votes polled}}{\text{Total number of candidates to be elected} + 1} \right] + 1$

For example if 4 Rajya Sabha members have to be elected by the 200 MLAs in Rajasthan, the winner would require  $(200/4 + 1 = 40 + 1)$  41 votes. When the votes are counted it is done on the basis of first preference votes secured by each candidate, of which the candidate has secured the first preference votes. If after the counting of all first preference votes, required number of candidates fail to fulfil the quota, the candidate who secured the lowest votes of first preference is eliminated and his/her votes are transferred to those who are mentioned as second preference on those ballot papers. This process continues till the required number of candidates are declared elected.

### Why did India adopt the FPTP system?

The reason for the popularity and success of the FPTP system is its simplicity. The entire election system is extremely simple to understand even for common voters who may have no specialised knowledge about politics and elections. There is also a clear choice presented to the voters at the time of elections. The FPTP system offers voters a choice not simply between parties but specific candidates. In other electoral systems, especially PR systems, voters are often asked to choose a party and the representatives are elected on the basis of party lists. As a result, there is no one representative who represents and is responsible for one locality. In constituency based system like the FPTP, the voters know who their own representative is and can hold him or her accountable.

More importantly, the makers of our Constitution also felt that PR based election may not be suitable for giving a stable government in a parliamentary system. This system requires that the executive has majority in the legislature. You will notice that the PR system may not produce a clear majority because seats in the legislature would be divided on the basis of share of votes. The FPTP system generally gives the largest party or coalition some extra bonus seats, more than their share of votes would allow. Thus this system makes it possible

for parliamentary government to function smoothly and effectively by facilitating the formation of a stable government. Finally, the FPTP system encourages voters from different social groups to come together to win an election in a locality. In a diverse country like India, a PR system would encourage each community to form its own nation-wide party. This may also have been at the back of the mind of our constitution makers. Normally, the working of the FPTP system results in a two-party system. This means that there are two major competitors for power and power is often shared by these two parties alternately. It is difficult for new parties or the third party to enter the competition and share power. In this respect, the experience of FPTP in India is slightly different. After independence, though we adopted the FPTP system, there emerged a one party dominance and along with it, there existed many smaller parties. After 1989, India is witnessing the functioning of the multi-party coalitions. At the same time, gradually, in many States, a two party competition is emerging. But the distinguishing feature of India's party system is that the rise of coalitions has made it possible for new and smaller parties to enter into electoral competition in spite of the FPTP system.

### Reservation of constituencies

We have noticed that in the FPTP election system, the candidate who secures the highest votes in a particular constituency is declared elected. This often works to the disadvantage of the smaller social groups. This is even more significant in the Indian social context. We have had a history of caste based discrimination. In such a social system, the FPTP electoral system can mean that the dominant social groups and castes can win everywhere and the oppressed social groups may continue to remain unrepresented. Our Constitution makers were aware of this difficulty and the need to provide a way to ensure fair and just representation to the oppressed social groups.

This issue was debated even before independence and the British government had introduced 'separate electorates'. This system meant that for electing a representative from a particular community, only those voters would be eligible who belong to that community. In the constituent assembly, many members expressed a fear that this will not suit our purposes. Therefore, it was decided to adopt the system of reserved constituencies. In this system, all voters in a constituency are eligible to vote but the candidates must belong to only a particular community or social section for which the seat is reserved.

There are certain social groups which may be spread across the country. In a particular constituency, their numbers may not be sufficient to be able to influence a victory of a candidate. However, taken across the country they are a significantly sizeable group. To ensure their proper representation, a system of reservation becomes necessary. The Constitution provides for reservation of seats in the Lok Sabha and State Legislative Assemblies for the Scheduled Castes and Scheduled Tribes. This provision was made initially for a period of 10 years and as a result of successive constitutional amendments, has been extended up to 2010. The Parliament can take a decision to further extend it, when the period of reservation expires. The number of seats reserved for both of these groups is in proportion to their share in the population of India. Today, of the 543 elected seats in the Lok Sabha, 79 are reserved for Scheduled Castes and 41 are reserved for Scheduled Tribes.



Who decides which constituency is to be reserved? On what basis is this decision taken? This decision is taken by an independent body called the Delimitation Commission. The Delimitation Commission is appointed by the President of India and works in collaboration with the Election Commission of India. It is appointed for the purpose of drawing up the boundaries of constituencies all over the country. A quota of constituencies to be reserved in each State is fixed depending on the proportion of SC or ST in that State. After drawing the boundaries, the Delimitation Commission looks at the composition of population in each constituency. Those constituencies that have the highest proportion of Scheduled Tribe population are reserved for ST. In the case of Scheduled Castes, the Delimitation Commission looks at two things. It picks constituencies that have higher proportion of Scheduled Caste population. But it also spreads these constituencies in different regions of the State. This is done because the Scheduled Caste population is generally spread evenly throughout the country. These reserved constituencies can be rotated each time the Delimitation exercise is undertaken.

The Constitution does not make similar reservation for other disadvantaged groups. Of late there has been a strong demand seeking reservation of seats in the Lok Sabha and State Assemblies for women. Given the fact that very few women are elected to representative bodies, the demand for reserving one-third seats for women is increasingly being articulated. Reservation of seats for women has been provided for in rural and urban local bodies. We shall discuss this in the chapter on Local Governments. A similar provision for Lok Sabha and Vidhan Sabhas would require an amendment to the Constitution. Such an amendment has been proposed several times in the Parliament but has not yet been passed.

### Free and Fair Elections

The true test of any election system is its ability to ensure a free and fair electoral process. If we want democracy to be translated into reality on the ground, it is important that the election system is impartial and transparent. The system of election must also allow the aspirations of the voter to find legitimate expression through the electoral results.

### Universal franchise and right to contest

Till 1989, an adult Indian meant an Indian citizen above the age of 21. An amendment to the Constitution in 1989, reduced the eligibility age to 18. Adult franchise ensures that all citizens are able to participate in the process of selecting their representative. This is consistent with the principle of equality and non-discrimination that we studied in the chapter on rights. Many people thought and many think so today that giving the right to vote to everyone irrespective of educational qualification was not right. But our Constitution makers had a firm belief in the ability and worth of all adult citizens as equals in the matter of deciding what is good for the society, the country and for their own constituencies.

What is true of the right to vote is also true of right to contest election. All citizens have the right to stand for election and become the representative of the people. However, there are different minimum age requirements for contesting elections. For example, in order to stand for Lok Sabha or Assembly election, a candidate must be at least 25 years old. There are some other restrictions also. For instance, there is a legal provision that a person who has undergone

imprisonment for two or more years for some offence is disqualified from contesting elections. But there are no restrictions of income, education or class or gender on the right to contest elections. In this sense, our system of election is open to all citizens.

### Independent Election Commission

Several efforts have been made in India to ensure the free and fair election system and process. The most important among these is the creation of an independent Election Commission to 'supervise and conduct' elections. Do you know that in many countries, there is an absence of an independent mechanism for conducting elections?

#### Article 324: (1)

**The superintendence, direction and control of the preparation of the electoral rolls for, and the conduct of, all elections to Parliament and to the Legislature of every State and of elections to the offices of President and Vice-President held under this Constitution shall be vested in a Commission (referred to in this Constitution as the Election Commission).**

Article 324 of the Indian Constitution provides for an independent Election Commission for the 'superintendence, direction and control of the electoral roll and the conduct of elections' in India. These words in the Constitution are very important, for they give the Election Commission a decisive role in virtually everything to do with elections. The Supreme Court has agreed with this interpretation of the Constitution. To assist the Election Commission of India there is a Chief Electoral Officer in every state. The Election Commission is not responsible for the conduct of local body elections. As we shall study in the chapter on Local Government, the State Election Commissioners work independently of the Election Commission of India and each has its own sphere of operation.

The Election Commission of India can either be a single member or a multi-member body. Till 1989, the Election Commission was single member. Just before the 1989 general elections, two Election Commissioners were appointed, making the body multi-member. Soon after the elections, the Commission reverted to its single member status. In 1993, two Election Commissioners were once again appointed and the Commission became multi-member and has remained multi-member since then. Initially there were many apprehensions about a multi-member Commission. There was a sharp difference of opinion between the then Chief Election Commissioner and the other Commissioners about who had how much power. The matter had to be settled by the Supreme Court. Now there is a general consensus that a multi-member Election Commission is more appropriate as power is shared and there is greater accountability.

The Chief Election Commissioner (CEC) presides over the Election Commission, but does not have more powers than the other Election Commissioners. The CEC and the two Election Commissioners have equal powers to take all decisions relating to elections as a collective body. They are appointed by the President of India on the advice of the Council of Ministers. It is therefore possible for a ruling party to appoint a partisan person to the Commission who might favour them in the elections. This fear has led many to suggest that this procedure should be changed. Many persons have suggested that a different method should be followed that makes consultation with the leader of opposition

and the Chief Justice of India necessary for the appointment of CEC and Election Commissioners. The Constitution ensures the security of the tenure of the CEC and Election Commissioners. They are appointed for a six year term or continue till the age of 65, whichever is earlier. The CEC can be removed before the expiry of the term, by the President if both Houses of Parliament make such a recommendation with a special majority. This is done to ensure that a ruling party cannot remove a CEC who refuses to favour it in elections. The Election Commissioners can be removed by the President of India.

**Special majority means: • Two-thirds majority of those present and voting, and • Simple majority of the total membership of the House.**

**The Election Commission of India has a wide range of functions.**

- It supervises the preparation of up-to-date voters' list. It makes every effort to ensure that the voters' list is free of errors like non-existence of names of registered voters or existence of names of those non-eligible or non-existent.
- It also determines the timing of elections and prepares the election schedule. The election schedule includes the notification of elections, date from which nominations can be filed, last date for filing nominations, last date of scrutiny, last date of withdrawal, date of polling and date of counting and declaration of results.
- During this entire process, the Election Commission has the power to take decisions to ensure a free and fair poll. It can postpone or cancel the election in the entire country or a specific State or constituency on the grounds that the atmosphere is vitiated and therefore, a free and fair election may not be possible. The Commission also implements a model code of conduct for parties and candidates. It can order a re-poll in a specific constituency. It can also order a recount of votes when it feels that the counting process has not been fully fair and just.
- The Election Commission accords recognition to political parties and allots symbols to each of them. The Election Commission has very limited staff of its own. It conducts the elections with the help of the administrative machinery. However, once the election process has begun, the commission has control over the administration as far as election related work is concerned. During the election process, the administrative officers of the State and central governments are assigned election related duty and in this respect, the Election Commission has full control over them. The EC can transfer the officers, or stop their transfers; it can take action against them for failing to act in a non-partisan manner.

Over the years, the Election Commission of India has emerged as an independent authority which has asserted its powers to ensure fairness in the election process. It has acted in an impartial and unbiased manner in order to protect the sanctity of the electoral process. The record of Election Commission also shows that every improvement in the functioning of institutions does not require legal or constitutional change. It is widely agreed that the Election Commission is more independent and assertive now than it was till twenty years ago. This is not because the powers and constitutional protection of the Election Commission have increased. The Election Commission has started using more effectively the powers it always had in the Constitution.

## Electoral Reforms

No system of election can ever be perfect. And in actual election process, there are bound to be many flaws and limitations. Any democratic society has to keep searching for mechanisms to make elections free and fair to the maximum.

- Our system of elections should be changed from the FPTP to some variant of the PR system. This would ensure that parties get seats, as far as possible, in proportion to the votes they get.
- There should be a special provision to ensure that at least one-third women are elected to the parliament and assemblies.
- There should be stricter provisions to control the role of money in electoral politics. The elections expenses should be paid by the government out of a special fund.
- Candidates with any criminal case should be barred from contesting elections, even if their appeal is pending before a court.
- There should be complete ban on the use of caste and religious appeals in the campaign.
- There should be a law to regulate the functioning of political parties and to ensure that they function in a transparent and democratic manner.

These are but a few suggestions. There is no consensus about these suggestions. Even if there was a consensus, there are limits to what the laws and formal provisions can do. Free and fair elections can be held only if the candidates, the parties and those involved in the election process agree to abide by the spirit of democratic competition.

*Should a person accused of a serious crime be barred from contesting elections?*

## Conclusion

In countries where representative democracy is practiced, elections and the representative character of those elections are crucial factors in making democracy effective and trustworthy. The success of India's election system can be gauged from a number of factors.

- Our election system has allowed the voters not only to freely choose representatives, but also to change governments peacefully both at the State and national level.
- Secondly, voters have consistently taken a keen interest in the election process and participated in it. The number of candidates and parties that contest elections is on the rise.
- Thirdly, the system of election has proved to be accommodative and inclusive. The social composition of our representatives has changed gradually. Now our representatives come from many different social sections, though the number of women legislators has not increased satisfactorily.
- Fourthly, the election outcome in most parts of the country does not reflect electoral malpractices and rigging. Of course, many attempts at rigging do take place. You must have read about violence, about complaints that voters' names disappear from the voters' list, about intimidation, and so on. Yet, such instances rarely directly affect the outcome of the election.
- Finally and most importantly, elections have become a part and parcel of our democratic life. No one can imagine a situation where a government would disrespect the verdict of an election. Similarly, no one can imagine that a government would be formed without holding elections. In fact, regularity and periodicity of elections has earned fame for India as a

great democratic experiment.

All these factors have earned for our election system a respect within and outside the country. The voter in India has gained confidence. The legitimacy of the Election Commission has increased in the eyes of the people. This vindicates the basic decisions taken by our Constitution makers. If the election process becomes more flawless, we as voters and citizens would be able to share more effectively in this carnival of democracy and make it more meaningful.

## Chapter 4 Executive

Legislature, executive and judiciary are the three organs of government. Together, they perform the functions of the government, maintain law and order and look after the welfare of the people. The Constitution ensures that they work in coordination with each other and maintain a balance among themselves. In a parliamentary system, executive and the legislature are interdependent: the legislature controls the executive, and, in turn, is controlled by the executive. In this chapter we shall discuss the composition, structure and function of the executive organ of the government. This chapter will also tell you about the changes that have occurred in recent times due to political practice. After reading this chapter, you will be able to

- make a distinction between the parliamentary and the presidential executive;
- understand the constitutional position of the President of India;
- know the composition and functioning of the Council of Ministers and the importance of the Prime Minister; and
- understand the importance and functioning of the administrative machinery.

### What is an Executive?

In the case of government, one body may take policy decisions and decide about rules and regulations, while the other one would be in charge of implementing those rules. The organ of government that primarily looks after the function of implementation and administration is called the executive.

What are the principal functions of the executive?

Executive is the branch of government responsible for the implementation of laws and policies adopted by the legislature. The executive is often involved in framing of policy. The official designations of the executive vary from country to country. Some countries have presidents, while others have chancellors. The executive branch is not just about presidents, prime ministers and ministers. It also extends to the administrative machinery (civil servants). While the heads of government and their ministers, saddled with the overall responsibility of government policy, are together known as the political executive, those responsible for day to day administration are called the permanent executive.

### What are the Different Types of Executive?

Every country may not have the same type of executive. You may have heard about the President of the USA and the Queen of England. But the powers and functions of the President of the USA are very different from the powers of the President of India. Similarly, the powers of the Queen of England are different from the powers of the King of Nepal. Both India and France have prime

ministers, but their roles are different from each other. Why is this so?

In a presidential system, the president is the Head of state as well as head of government. In this system the office of president is very powerful, both in theory and practice. Countries with such a system include the United States, Brazil and most nations in Latin America. In a parliamentary system, the prime minister is the head of government. Most parliamentary systems have a president or a monarch who is the nominal Head of state. In such a system, the role of president or monarch is primarily ceremonial and prime minister along with the cabinet wields effective power. Countries with such system include Germany, Italy, Japan, United Kingdom as well as Portugal. A semi-presidential system has both a president and a prime minister but unlike the parliamentary system the president may possess significant day-to-day powers. In this system, it is possible that sometimes the president and the prime minister may belong to the same party and at times they may belong to two different parties and thus, would be opposed to each other. Countries with such a system include France, Russia, Sri Lanka, etc.

### Parliamentary Executive in India

When the Constitution of India was written, India already had some experience of running the parliamentary system under the Acts of 1919 and 1935. This experience had shown that in the parliamentary system, the executive can be effectively controlled by the representatives of the people. The makers of the Indian Constitution wanted to ensure that the government would be sensitive to public expectations and would be responsible and accountable. The other alternative to the parliamentary executive was the presidential form of government. But the presidential executive puts much emphasis on the president as the chief executive and as source of all executive power. There is always the danger of personality cult in presidential executive. The makers of the Indian Constitution wanted a government that would have a strong executive branch, but at the same time, enough safeguards should be there to check against the personality cult. In the parliamentary form there are many mechanisms that ensure that the executive will be answerable to and controlled by the legislature or people's representatives. So the Constitution adopted the parliamentary system of executive for the governments both at the national and State levels. According to this system, there is a President who is the formal Head of the state of India and the Prime Minister and the Council of Ministers, which run the government at the national level. At the State level, the executive comprises the Governor and the Chief Minister and Council of Ministers.

The Constitution of India vests the executive power of the Union formally in the President. In reality, the President exercises these powers through the Council of Ministers headed by the Prime Minister. The President is elected for a period of five years. But there is no direct election by the people for the office of President. The President is elected indirectly. This means that the president is elected not by the ordinary citizens but by the elected MLAs and MPs. This election takes place in accordance with the principle of proportional representation with single transferable vote.

The President can be removed from office only by Parliament by following the procedure for impeachment. This procedure requires a special



majority as explained in the last chapter. The only ground for impeachment is violation of the Constitution.

### **Power and position of President**

Article 74 (1): There shall be a Council of Ministers with the Prime Minister at the head to aid and advise the President who shall in the exercise of his functions, act in accordance with such advice.

Provided that the President may require the Council of Ministers to reconsider such advice....., and the President shall act in accordance with the advice tendered after such reconsideration.

*Do you know what the word shall means here? It indicates that the advice is binding on the President. In view of the controversy about the scope of the President's powers, a specific mention was made in the Constitution by an amendment that the advice of the Council of Ministers will be binding on the President. By another amendment made later, it was decided that the President can ask the Council of Ministers to reconsider its advice but, has to accept the reconsidered advice of the Council of Ministers.*

### **Discretionary Powers of the President**

On the basis of the above discussion can we infer that the President has no discretionary power under any circumstances? This will be an incorrect assessment. Constitutionally, the President has a right to be informed of all important matters and deliberations of the Council of Ministers. The Prime Minister is obliged to furnish all the information that the President may call for. The President often writes to the Prime Minister and expresses his views on matters confronting the country.

Besides this, there are at least three situations where the President can exercise the powers using his or her own discretion. In the first place, we have already noted that the President can send back the advice given by the Council of Ministers and ask the Council to reconsider the decision. In doing this, the President acts on his (or her) own discretion. When the President thinks that the advice has certain flaws or legal lacunae, or that it is not in the best interests of the country, the President can ask the Council to reconsider the decision. Although, the Council can still send back the same advice and the President would then be bound by that advice, such a request by the President to reconsider the decision, would naturally carry a lot of weight. So, this is one way in which the president can act in his own discretion. Secondly, the President also has veto power by which he can withhold or refuse to give assent to Bills (other than Money Bill) passed by the Parliament. Every bill passed by the Parliament goes to the President for his assent before it becomes a law. The President can send the bill back to the Parliament asking it to reconsider the bill. This 'veto' power is limited because, if the Parliament passes the same bill again and sends it back to the President, then, the President has to give assent to that bill. However, there is no mention in the Constitution about the time limit within which the President must send the bill back for reconsideration. This means that the President can just keep the bill pending with him without any time limit. This gives the President an informal power to use the veto in a very effective manner. This is sometimes referred to as 'pocket veto'.

Then, the third kind of discretion arises more out of political circumstances. Formally, the President appoints the Prime Minister. Normally, in the parliamentary system, a leader who has the support of

the majority in the Lok Sabha would be appointed as Prime Minister and the question of discretion would not arise. But imagine a situation when after an election, no leader has a clear majority in the Lok Sabha. Imagine further that after attempts to forge alliances, two or three leaders are claiming that they have the support of the majority in the house. Now, the President has to decide whom to appoint as the Prime Minister. In such a situation, the President has to use his own discretion in judging who really may have the support of the majority or who can actually form and run the government.

We saw that there is no time limit on the President for giving his assent to a bill. Do you know that such a thing has already happened? In 1986, the Parliament passed a bill known as Indian Post office (amendment) bill. This bill was widely criticised by many for it sought to curtail the freedom of the press. The then President, Giani Zail Singh, did not take any decision on this bill. After his term was over, the next President, Venkataraman sent the bill finally back to the Parliament for reconsideration. By that time, the government that brought the bill before the Parliament had changed and a new government was elected in 1989. This government belonged to a different coalition and did not bring the bill back before the Parliament. Thus, Zail Singh's decision to postpone giving assent to the bill effectively meant that the bill could never become a law! Since 1989 major political changes have considerably increased the importance of the presidential office. In the four parliamentary elections held from 1989 to 1998, no single party or coalition attained a majority in the Lok Sabha. These situations demanded presidential intervention either in order to constitute governments or to grant a request for dissolution of Lok Sabha by a Prime Minister who could not prove majority in the House. It may thus be said that presidential discretion is related to political conditions. There is greater scope for presidential assertiveness when governments are not stable and coalitions occupy power.

### **President's role in choosing the Prime Minister**

*After 1977, party politics in India became more competitive and there have been many instances when no party had clear majority in the Lok Sabha. What does the President do in such situations? No political party or coalition secured majority in the elections held in March 1998. The BJP and its allies secured 251 seats, 21 short of a majority. President Narayanan adopted an elaborate procedure. He asked the leader of the alliance, Atal Behari Vajpayee, "to furnish documents in support of his claim from concerned political parties." Not stopping at this the President also advised Vajpayee to secure a vote of confidence within ten days of being sworn in.*

For the most part, the President is a formal power holder and a ceremonial head of the nation. You may wonder why then do we need a President? In a parliamentary system, the Council of Ministers is dependent on the support of the majority in the legislature. This also means that the Council of Ministers may be removed at any time and a new Council of Ministers will have to be put in place. Such a situation requires a Head of the state who has a fixed term, who may be empowered to appoint the Prime Minister and who may symbolically represent the entire country. This is exactly the role of the President in ordinary circumstances. Besides, when no party has a clear majority, the President has the additional responsibility of making a choice and appointing the Prime Minister to

run the government of the country.

## **The Vice President of India**

*The Vice President is elected for five years. His election method is similar to that of the President, the only difference is that members of State legislatures are not part of the electoral college. The Vice President may be removed from his office by a resolution of the Rajya Sabha passed by a majority and agreed to by the Lok Sabha. The Vice President acts as the ex-officio Chairman of the Rajya Sabha and takes over the office of the President when there is a vacancy by reasons of death, resignation, removal by impeachment or otherwise. The Vice President acts as the President only until a new President is elected. B. D. Jatti acted as President on the death of Fakhruddin Ali Ahmed until a new President was elected.*

## **Prime Minister and Council of Ministers**

No discussion of government or politics in India, would normally take place without mentioning one office: the Prime Minister of India. Can you imagine why this is so? We have already seen earlier in this chapter that the President exercises his powers only on the advice of the Council of Ministers. The Council of Ministers is headed by the Prime Minister. Therefore, as head of the Council of Ministers, the Prime Minister becomes the most important functionary of the government in our country.

In the parliamentary form of executive, it is essential that the Prime Minister has the support of the majority in the Lok Sabha. This support by the majority also makes the Prime Minister very powerful.

The moment this support of the majority is lost, the Prime Minister loses the office. For many years after independence, the Congress party had the majority in the Lok Sabha and its leader would become the Prime Minister. Since 1989, there have been many occasions when no party had majority in the Lok Sabha. Various political parties have come together and formed a coalition that has majority in the House. In such situations, a leader who is acceptable to most partners of the coalition becomes the Prime Minister. Formally, a leader who has the support of the majority is appointed by the President as Prime Minister.

The Prime Minister then decides who will be the ministers in the Council of Ministers. The Prime Minister allocates ranks and portfolios to the ministers. Depending upon the seniority and political importance, the ministers are given the ranks of cabinet minister, minister of State or deputy minister. In the same manner, Chief Ministers of the States choose ministers from their own party or coalition. The Prime Minister and all the ministers have to be members of the Parliament. If someone becomes a minister or Prime Minister without being an MP, such a person has to get elected to the Parliament within six months.

## **Size of the Council of Ministers**

*Before the 91st Amendment Act (2003), the size of the Council of Ministers was determined according to exigencies of time and requirements of the situation. But this led to very large size of the Council of Ministers. Besides, when no party had a clear majority, there was a temptation to win over the support of the members of the Parliament by giving them ministerial positions as there was no restriction on the number of the members of the Council of Ministers. This was happening in many States also. Therefore, an amendment was made that the Council of Ministers shall not exceed 15 percent*

*of total number of members of the House of People (or Assembly, in the case of the States).*

In the chapter on the legislature, you will study in detail the various mechanisms through which the Parliament controls the executive. But remember that the most important feature of parliamentary executive is that the executive is routinely under the control and supervision of the legislature.

The Council of Ministers is collectively responsible to the Lok Sabha. This provision means that a Ministry which loses confidence of the Lok Sabha is obliged to resign. The principle indicates that the ministry is an executive committee of the Parliament and it collectively governs on behalf of the Parliament.

Collective responsibility is based on the principle of the solidarity of the cabinet. It implies that a vote of no confidence even against a single minister leads to the resignation of the entire Council of Ministers. It also indicates that if a minister does not agree with a policy or decision of the cabinet, he or she must either accept the decision or resign. It is binding on all ministers to pursue or agree to a policy for which there is collective responsibility.

In India, the Prime Minister enjoys a pre-eminent place in the government. The Council of Ministers cannot exist without the Prime Minister. The Council comes into existence only after the Prime Minister has taken the oath of office. The death or resignation of the Prime Minister automatically brings about the dissolution of the Council of Ministers but the demise, dismissal or resignation of a minister only creates a ministerial vacancy. The Prime Minister acts as a link between the Council of Ministers on the one hand and the President as well as the Parliament on the other. It is this role of the Prime Minister which led Pt. Nehru to describe him as 'the linchpin of Government'. It is also the constitutional obligation of the Prime Minister to communicate to the President all decisions of the Council of Ministers relating to the administration of the affairs of the Union and proposals for legislation. The Prime Minister is involved in all crucial decisions of the government and decides on the policies of the government. Thus, the power wielded by the Prime Minister flows from various sources: control over the Council of Ministers, leadership of the Lok Sabha, command over the bureaucratic machine, access to media, projection of personalities during elections, projection as national leader during international summitry as well as foreign visits.

However, the power which the Prime Minister wields and actually puts into use depends upon the prevailing political conditions. The position of the Prime Minister and Council of Ministers has been unassailable whenever a single political party has secured majority in the Lok Sabha. However, this has not been the case when governments have been led by coalitions of political parties. Since 1989, we have witnessed many coalition governments in India. Many of these governments could not remain in power for the full term of the Lok Sabha. They were either removed or they resigned due to loss of support of the majority. These developments have affected the working of the parliamentary executive.

In the first place, these developments have resulted in a growing discretionary role of the President in the selection of Prime Ministers. Secondly, the coalitional nature of Indian politics in this period has necessitated much more consultation between political partners, leading to erosion of prime ministerial authority.

Thirdly, it has also brought restrictions on various prerogatives of the Prime Minister like choosing the ministers and deciding their ranks and portfolios. Fourthly, even the policies and programmes of the government cannot be decided by the Prime Minister alone. Political parties of different ideologies come together both as pre-poll and post-poll allies to form a government. Policies are framed after a lot of negotiations and compromises among the allies. In this entire process, the Prime Minister has to act more as a negotiator than as leader of the government. At the State level, a similar parliamentary executive exists, though with some variations. The most important variation is that there is a Governor of the State appointed by the President (on the advice of the central government). Though the Chief Minister, like the Prime Minister is the leader of the majority party in the Assembly, the Governor has more discretionary powers. However, the main principles of parliamentary system operate at the State level too.

### **Permanent Executive: Bureaucracy**

#### **Who implements the decisions of the ministers?**

The Executive organ of the government includes the Prime Minister, the ministers and a large organisation called the bureaucracy or the administrative machinery. To underline the difference between this machinery and the military service, it is described as civil service. Trained and skilled officers who work as permanent employees of the government are assigned the task of assisting the ministers in formulating policies and implementing these policies.

In a democracy, the elected representatives and the ministers are in charge of government and the administration is under their control and supervision. In the parliamentary system, the legislature also exercises control over the administration. The administrative officers cannot act in violation of the policies adopted by the legislature. It is the responsibility of the ministers to retain political control over the administration. India has established professional administrative machinery. At the same time, this machinery is made politically accountable. The bureaucracy is also expected to be politically neutral. This means that the bureaucracy will not take any political position on policy matters. In a democracy, it is always possible that a party is defeated in elections and the new government wants to opt for new policies in the place of policies of the previous government. In such a situation, it is the responsibility of the administrative machinery to faithfully and efficiently participate in drafting the policy and in its implementation.

The Indian bureaucracy today is an enormously complex system. It consists of the All-India services, State services, employees of the local governments, and technical and managerial staff running public sector undertakings. Makers of our Constitution were aware of the importance of the non-partisan and professional bureaucracy. They also wanted the members of the civil services or bureaucracy to be impartially selected on the basis of merit. So, the Union Public Service Commission has been entrusted with the task of conducting the process of recruitment of the civil servants for the government of India. Similar public service commissions are provided for the States also. Members of the Public Service Commissions are appointed for a fixed term. Their removal or suspension is subject to a thorough enquiry made by a judge of the Supreme Court.

While efficiency and merit are the norms for recruitment, the Constitution also ensures that all sections of the society including the weaker sections have an opportunity to be part of the public bureaucracy. For this purpose, the Constitution has provided for reservation of jobs for the Dalits and Adivasis. Subsequently, reservations have also been provided for women and other backward classes. These provisions ensure that the bureaucracy would be more representative and social inequalities will not come in the way of recruitment to the civil service. Persons selected by the UPSC for Indian Administrative Service and Indian Police Service constitute the backbone of the higher level bureaucracy in the States. You may know that the collector of a district is the most important officer of the government at the district level. Do you know that the collector is normally an IAS officer and that the officer is governed by the service conditions laid down by the central government? An IAS or IPS officer is assigned to a particular State, where he or she works under the supervision of the State government. However, the IAS or IPS officers are appointed by the central government, they can go back into the service of the central government and most importantly, only the central government can take disciplinary action against them. This means that the key administrative officers of the States are under the supervision and control of the central government. Apart from the IAS and the IPS officers appointed by the UPSC, the administration of the State is looked after by officers appointed through the State Public Service Commissions. As we shall study later in the chapter on federalism, this feature of the bureaucracy strengthens the control of the central government over the administration of the States.

The bureaucracy is an instrument through which welfare policies of the government must reach the people. But most often, it is so powerful that people are afraid of approaching a government officer. It is a common experience of the people that bureaucracy is insensitive to the demands and expectations of the ordinary citizen. Only if the democratically elected government controls the bureaucracy, some of these problems can be effectively handled. On the other hand, too much political interference turns the bureaucracy into an instrument in the hands of the politician. Though the Constitution has created independent machinery for recruitment, many people think that there is no provision for protecting the civil servants from political interference in the performance of their duties. It is also felt that enough provisions are not there to ensure the accountability of the bureaucracy to the citizen. There is an expectation that measures like the Right to Information may make the bureaucracy a little more responsive and accountable.

### **Conclusion**

The modern executive is a very powerful institution of government. The executive enjoys greater powers compared to other organs of the government. This generates a greater need to have democratic control over the executive. The makers of our Constitution thought with foresight that the executive must be put firmly under regular supervision and control. Thus, a parliamentary executive was chosen. Periodic elections, constitutional limits over the exercise of powers and democratic politics have ensured that executive organ cannot become unresponsive.



## Chapter 5 Legislature

After reading this chapter you would know

- the importance of the legislature;
- the functions and powers of the Parliament of India;
- the law making procedure;
- how the Parliament controls the executive; and
- how the Parliament regulates itself.

### Why do we need a Parliament?

Legislature is not merely a law making body. Lawmaking is but one of the functions of the legislature. It is the centre of all democratic political process. It is packed with action; walkouts, protests, demonstration, unanimity, concern and co-operation. All these serve very vital purposes. Indeed, a genuine democracy is inconceivable without a representative, efficient and effective legislature. The legislature also helps people in holding the representatives accountable. This is indeed, the very basis of representative democracy.

Yet, in most democracies, legislatures are losing central place to the executive. In India too, the Cabinet initiates policies, sets the agenda for governance and carries them through. This has led some critics to remark that the Parliament has declined. But even very strong cabinets must retain majority in the legislature. A strong leader has to face the Parliament and answer to the satisfaction of the Parliament. Herein lies the democratic potential of the Parliament. It is recognised as one of the most democratic and open forum of debate. On account of its composition, it is the most representative of all organs of government. It is above all, vested with the power to choose and dismiss the government.

### Why do we need Two Houses of Parliament?

The term 'Parliament' refers to the national legislature. The legislature of the States is described as State legislature. The Parliament in India has two houses. When there are two houses of the legislature, it is called a bicameral legislature. The two Houses of the Indian Parliament are the Council of States or the Rajya Sabha and the House of People or Lok Sabha. The Constitution has given the States the option of establishing either a unicameral or bicameral legislature. At present only five States have a bicameral legislature.

### States with the Second Chamber of Legislature

States having a bicameral legislature: Bihar, Jammu and Kashmir, Karnataka, Maharashtra, Telangan, Uttar Pradesh

Countries with large size and much diversity usually prefer to have two houses of the national legislature to give representation to all sections in the society and to give representation to all geographical regions or parts of the country. A bicameral legislature has one more advantage. A bicameral legislature makes it possible to have every decision reconsidered. Every decision taken by one house goes to the other house for its decision. This means that every bill and policy would be discussed twice. This ensures a double check on every matter. Even if one house takes a decision in haste, that decision will come for discussion in the other house and reconsideration will be possible.

### Rajya Sabha

Each of the two Houses of the Parliament has different bases of representation. The Rajya Sabha represents the States of India. It is an indirectly elected body. Residents

of the State elect members to State Legislative Assembly. The elected members of State Legislative Assembly in turn elect the members of Rajya Sabha. We can imagine two different principles of representation in the second chamber. One way is to give equal representation to all the parts of the country irrespective of their size or population. We may call this as symmetrical representation. On the other hand, parts of the country may be given representation according to their population. This second method means that regions or parts having larger population would have more representatives in the second chamber than regions having less population.

In the U.S.A, every state has equal representation in the Senate. This ensures equality of all the states. But this also means that a small state would have the same representation as the larger states. The system of representation adopted for the Rajya Sabha is different from that in the USA. The number of members to be elected from each State has been fixed by the fourth schedule of the Constitution.

Members of the Rajya Sabha are elected for a term of six years. They can get re-elected. All members of the Rajya Sabha do not complete their terms at the same time.

Every two years, one third members of the Rajya Sabha complete their term and elections are held for those one third seats only. Thus, the Rajya Sabha is never fully dissolved. Therefore, it is called the permanent House of the Parliament. The advantage of this arrangement is that even when the Lok Sabha is dissolved and elections are yet to take place, the meeting of the Rajya Sabha can be called and urgent business can be conducted.

Apart from the elected members, Rajya Sabha also has twelve nominated members. The President nominates these members. These nominations are made from among those persons who have made their mark in the fields of literature, arts, social service, science etc.

### Lok Sabha

The Lok Sabha and the State Legislative Assemblies are directly elected by the people. For the purpose of election, the entire country (State, in case of State Legislative Assembly) is divided into territorial constituencies of roughly equal population. One representative is elected from each constituency through universal, adult suffrage where the value of vote of every individual would be equal to another. At present there are 543 constituencies. This number has not changed since 1971 census.

The Lok Sabha is elected for a period of five years. This is the maximum. We have seen in the chapter on the executive that before the completion of five years, the Lok Sabha can be dissolved if no party or coalition can form the government or if the Prime Minister advises the President to dissolve the Lok Sabha and hold fresh elections.

What does the Parliament do?

What is the function of the legislature? Do both Houses of the Parliament have similar functions? Is there a difference in the powers of the two Houses?

Apart from law making, the Parliament is engaged in many other functions. Let us list the functions of the Parliament:

- **Legislative Function:** The Parliament enacts legislations for the country. Despite being the chief law making body, the Parliament often merely approves legislations. The actual task of drafting the bill is performed by the bureaucracy under the supervision of the minister concerned. The substance and even the timing of the bill are decided by the Cabinet. No major

bill is introduced in the Parliament without the approval of the Cabinet. Members other than ministers can also introduce bills but these have no chance of being passed without the support of the government.

- **Control of Executive and ensuring its accountability:** Perhaps the most vital function of the Parliament is to ensure that the executive does not overstep its authority and remains responsible to the people who have elected them. We shall discuss this function in greater detail later in this chapter.

- **Financial Function:** Government is about spending a lot of money on various matters. Where does this money come from? Every government raises resources through taxation. However, in a democracy, legislature controls taxation and the way in which money is used by the government. If the Government of India proposes to introduce any new tax, it has to get the approval of the Lok Sabha. The Financial powers of the Parliament, involve grant of resources to the government to implement its programmes. The government has to give an account to the Legislature about the money it has spent and resources that it wishes to raise. The legislature also ensures that the government does not mispend or overspend. This is done through the budget and annual financial statements.

- **Representation:** Parliament represents the divergent views of members from different regional, social, economic, religious groups of different parts of the country.

- **Debating Function:** The Parliament is the highest forum of debate in the country. There is no limitation on its power of discussion. Members are free to speak on any matter without fear. This makes it possible for the Parliament to analyse any or every issue that faces the nation. These discussions constitute the heart of democratic decision making.

- **Constituent Function:** The Parliament has the power of discussing and enacting changes to the Constitution. The constituent powers of both the houses are similar. All constitutional amendments have to be approved by a special majority of both Houses.

- **Electoral functions:** The Parliament also performs some electoral functions. It elects the President and Vice President of India.

- **Judicial functions:** The judicial functions of the Parliament include considering the proposals for removal of President, Vice-President and Judges of High Courts and Supreme Court.

## Powers of Rajya Sabha

We discussed above, the functions that are performed by the Parliament in general. However, in a bicameral legislature, there is some difference between the powers of the two Houses. Look at the charts showing the powers of Lok Sabha and Rajya Sabha.

### Powers of the Lok Sabha

- **Makes Laws on matters included in Union List and Concurrent List. Can introduce and enact money and non money bills.**

- Approves proposals for taxation, budgets and annual financial statements.
- Controls the executive by asking questions, supplementary questions, resolutions and motions and through no confidence

### Powers of Rajya Sabha

- Considers and approves non money bills and suggests amendments to money bills.
- Approves constitutional amendments.
- Exercises control over executive by asking questions, introducing motions and resolutions.
- Participates in the election and removal of the President, Vice President, Judges of Supreme Court

motion.

- Amends the Constitution.
- Approves the Proclamation of emergency.
- Elects the President and Vice President and removes Judges of Supreme Court and High Court.
- Establishes committees and commissions and considers their reports.

and High Court. It can alone initiate the procedure for removal of Vice President.

- Can give the Union parliament power to make laws on matters included in the State list.

## Special Powers of Rajya Sabha

As you know, the Rajya Sabha is an institutional mechanism to provide representation to the States. Its purpose is to protect the powers of the States.

Therefore, any matter that affects the States must be referred to it for its consent and approval. Thus, if the Union Parliament wishes to remove a matter from the State list (over which only the State Legislature can make law) to either the Union List or Concurrent List in the interest of the nation, the approval of the Rajya Sabha is necessary. This provision adds to the strength of the Rajya Sabha. However, experience shows that the members of the Rajya Sabha represent their parties more than they represent their States.

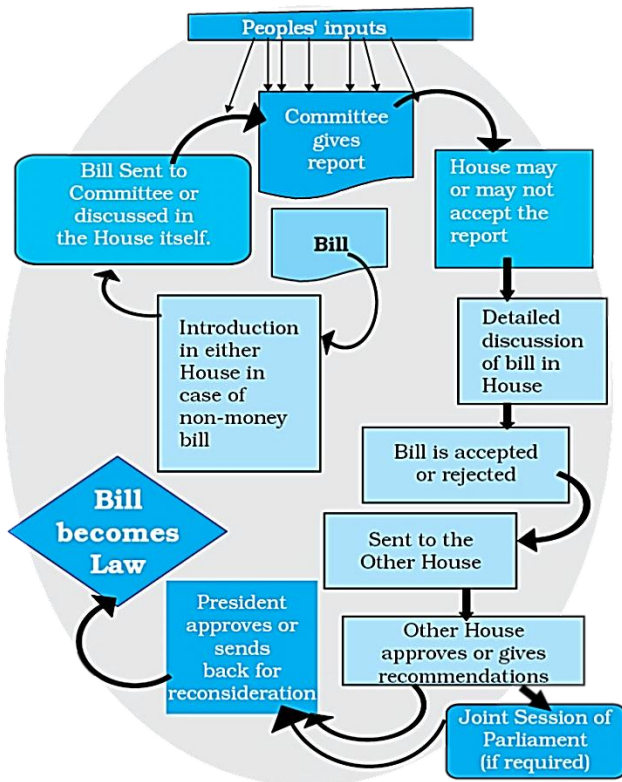
**Powers exercised only by the Lok Sabha:** Then, there are powers that only the Lok Sabha exercises. The Rajya Sabha cannot initiate, reject or amend money bills. The Council of Ministers is responsible to the Lok Sabha and not Rajya Sabha. Therefore, Rajya Sabha can criticise the government but cannot remove it.

Can you explain why? The Rajya Sabha is elected by the MLAs and not directly by the people. Therefore, the Constitution stopped short of giving certain powers to the Rajya Sabha. In a democratic form as adopted by our Constitution, the people are the final authority. By this logic, the representatives, directly elected by the people, should have the crucial powers of removing a government and controlling the finances.

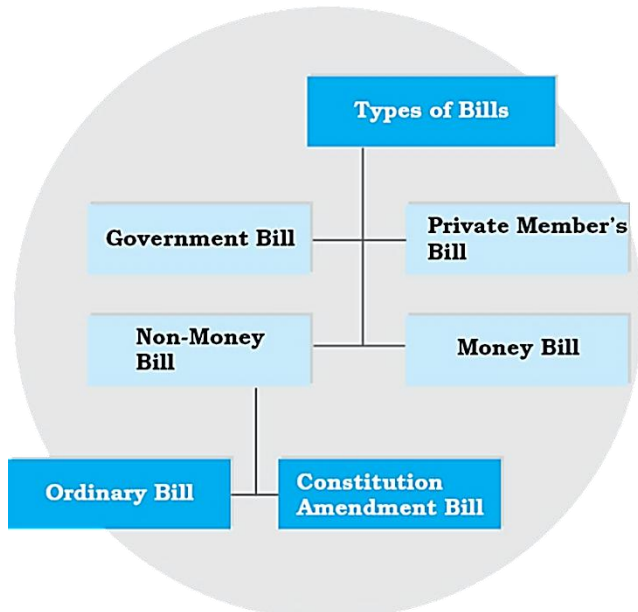
In all other spheres, including passing of non-money bills, constitutional amendments, and impeaching the President and removing the Vice President the powers of Lok Sabha and Rajya Sabha are co-equal.

**How does the Parliament make Laws?**

The basic function of any legislature is to make laws for its people. A definite procedure is followed in the process of making law. Some of the procedures of law making are mentioned in the Constitution, while some have evolved from conventions. Follow a bill through the legislative process and you will clearly see that the law making process is technical and even tedious.



A bill is a draft of the proposed law. There can be different types of bills. When a non-minister proposes a bill, it is called private member's Bill. A bill proposed by a minister is described as Government Bill. Let us now see the different stages in the life of a bill.



Even before a bill is introduced in the Parliament there may be a lot of debate on the need for introducing such a bill. A political party may pressurise the government to initiate a bill in order to fulfil its election promises or to improve its chances of winning forthcoming elections. Interest groups, media and citizens' forums may also persuade the government for a particular legislation. Law making is thus not merely a legal procedure but also a political course of action. The preparation of a bill itself involves many considerations such as resources required to implement the law, the support or opposition that the bill is likely to produce, the impact that the law may have on the electoral prospect of the ruling party etc. In the era of coalition politics especially, a bill proposed by the government has to be

acceptable to all the partners of the coalition. Such practical considerations can hardly be ignored. The Cabinet considers all these before arriving at a decision to enact a law.

Once the Cabinet approves the policy behind the legislation, the task of drafting the legislation begins. The draft of any bill is prepared by the concerned ministry. For instance a bill raising the marriageable age of girls from 18 to 21 will be prepared by the law ministry. The ministry of women and child welfare may also be involved in it.

Within the Parliament, a bill may be introduced in the Lok Sabha or Rajya Sabha by a member of the House (but often a minister responsible for the subject introduces the bill). A money bill can be introduced only in Lok Sabha. Once passed there, it is sent to the Rajya Sabha.

A large part of the discussion on the bills takes place in the committees. The recommendation of the committee is then sent to the House. That is why committees are referred to as miniature legislatures. This is the second stage in the law making process. In the third and final stage, the bill is voted upon. If a non-money bill is passed by one House, it is sent to the other House where it goes through exactly the same procedure.

As you know, a bill has to be passed by both Houses for enactment. If there is disagreement between the two Houses on the proposed bill, attempt is made to resolve it through Joint Session of Parliament. In the few instances when joint sessions of the parliament were called to resolve a deadlock, the decision has always gone in favour of the Lok Sabha.

If it is a money bill, the Rajya Sabha can either approve the bill or suggest changes but cannot reject it. If it takes no action within 14 days the bill is deemed to have been passed. Amendments to the bill, suggested by Rajya Sabha, may or may not be accepted by the Lok Sabha.

### Article 109 Special procedure in respect of Money Bills.—(1)

#### A Money Bill shall not be introduced in the Council of States

When a bill is passed by both Houses, it is sent to the President for his assent. The assent of the President results in the enactment of a bill into a law.

How does the Parliament Control the Executive?

In a parliamentary democracy, the executive is drawn from the party or a coalition of parties that has a majority in Lok Sabha. It is not difficult for the executive to exercise unlimited and arbitrary powers with the support of the majority party. In such a situation, parliamentary democracy may slip into Cabinet dictatorship, where the Cabinet leads and the House merely follows. Only if the Parliament is active and vigilant, can it keep regular and effective check on the executive. There are many ways in which the Parliament can control the executive. But basic to them all is the power and freedom of the legislators as people's representatives to work effectively and fearlessly. For instance, no action can be taken against a member for whatever the member may have said in the legislature. This is known as parliamentary privilege. The presiding officer of the legislature has the final powers in deciding matters of breach of privilege. The main purpose of such privileges is to enable the members of the legislature to represent the people and exercise effective control over the executive. How does the Parliament exercise such control? What are the means available at its disposal? Is parliamentary control



successful in curbing executive excesses?

## Instruments of Parliamentary Control

The legislature in parliamentary system ensures executive accountability at various stages: policy making, implementation of law or policy and during and post-implementation stage. The legislature does this through the use of a variety of devices:

- Deliberation and discussion
- Approval or Refusal of laws
- Financial control
- No confidence motion

**Deliberation and discussion:** During the law making process, members of the legislature get an opportunity to deliberate on the policy direction of the executive and the ways in which policies are implemented. Apart from deliberating on bills, control may also be exercised during the general discussions in the House. The Question Hour, which is held every day during the sessions of Parliament, where Ministers have to respond to searching questions raised by the members; Zero Hour where members are free to raise any matter that they think is important (though the ministers are not bound to reply), half-an-hour discussion on matters of public importance, adjournment motion etc. are some instruments of exercising control.

Perhaps the question hour is the most effective method of keeping vigil on the executive and the administrative agencies of the government. Members of Parliament have shown great interest in question hour and maximum attendance is recorded during this time. Most of the questions aim at eliciting information from the government on issues of public interest such as, price rise, availability of food grains, atrocities on weaker sections of the society, riots, black-marketing etc. This gives the members an opportunity to criticise the government, and represent the problems of their constituencies. The discussions during the question hour are so heated that it is not uncommon to see members raise their voice, walk to the well of the house or walk out in protest to make their point. This results in considerable loss of legislative time. At the same time, we must remember that many of these actions are political techniques to gain concessions from government and in the process force executive accountability.

**Approval and ratification of laws:** Parliamentary control is also exercised through its power of ratification. A bill can become a law only with the approval of the Parliament. A government that has the support of a disciplined majority may not find it difficult to get the approval of the Legislature. Such approvals however, cannot be taken for granted. They are the products of intense bargaining and negotiations amongst the members of ruling party or coalition of parties and even government and opposition. If the government has majority in Lok Sabha but not in the Rajya Sabha, as has happened during the Janata Party rule in 1977 and N.D.A rule in 2000, the government will be forced to make substantial concessions to gain the approval of both the Houses. Many bills, such as the Lok Pal Bill have failed enactment, Prevention of Terrorism bill (2002) was rejected by the Rajya Sabha.

**Financial control:** As mentioned earlier, financial resources to implement the programmes of the government are granted through the budget. Preparation and presentation of budget for the approval of the legislature is constitutional obligation of the government. This obligation allows the legislature to exercise control over the purse strings of the

government. The legislature may refuse to grant resources to the government. This seldom happens because the government ordinarily enjoys support of the majority in the parliamentary system. Nevertheless, before granting money the Lok Sabha can discuss the reasons for which the government requires money. It can enquire into cases of misuse of funds on the basis of the report of the Comptroller and Auditor General and Public Accounts committees. But the legislative control is not only aimed at financial propriety. The legislature is concerned about the policies of the government that are reflected in the budget. Through financial control, the legislature controls the policy of the government.

**No Confidence Motion:** The most powerful weapon that enables the Parliament to ensure executive accountability is the no-confidence motion. As long as the government has the support of its party or coalition of parties that have a majority in the Lok Sabha, the power of the House to dismiss the government is fictional rather than real. However, after 1989, several governments have been forced to resign due to lack of confidence of the house. Each of these governments lost the confidence of the Lok Sabha because they failed to retain the support of their coalition partners.

Thus, the Parliament can effectively control the executive and ensure a more responsive government. It is however important for this purpose, that there is adequate time at the disposal of the House, the members are interested in discussion and participate effectively and there is willingness to compromise amongst the government and the opposition. In the last two decades, there has been a gradual decline in sessions of the Lok Sabha and State Legislative Assemblies and time spent on debates. Moreover, the Houses of the Parliament have been plagued by absence of quorum, boycott of sessions by members of opposition which deprive the house the power to control the executive through discussion.

## What do the Committees of Parliament do?

A significant feature of the legislative process is the appointment of committees for various legislative purposes. These committees play a vital role not merely in law making, but also in the day-to-day business of the House. Since the Parliament meets only during sessions, it has very limited time at its disposal. The making of law for instance requires in-depth study of the issue under consideration. This in turn demands more attention and time. Similarly, there are other important functions also, like studying the demands for grants made by various ministries, looking into expenditure incurred by various departments, investigating cases of corruption etc. Parliamentary committees perform such functions. Since 1983, India has developed a system of parliamentary standing committees. There are over twenty such departmentally related committees. Standing Committees supervise the work of various departments, their budget, their expenditure and bills that come up in the house relating to the department. Apart from standing committees, the Joint Parliamentary Committees have occupied a position of eminence in our country. Joint Parliamentary Committees (JPCs) can be set up for the purpose of discussing a particular bill, like the joint committee to discuss bill, or for the purpose of investigating financial irregularities. Members of these committees are selected from both Houses.

The committee system has reduced the burden on the Parliament. Many important bills have been referred to committees. The Parliament has merely approved the

work done in the committees with few occasional alterations. Of course legally speaking, no bill can become law, and no budget will be sanctioned unless approved by the Parliament. But the Parliament rarely rejects the suggestions made by the committees. As far as the nature of legislature is concerned it is such that there are restrictions only so far as procedure is concerned. But in substance there are no restrictions, no limitations on the sovereignty of the legislature or parliament....

### How does the Parliament Regulate Itself?

Parliament as mentioned earlier is a debating forum. It is through debates that the parliament performs all its vital functions. Such discussions must be meaningful and orderly so that the functions of the Parliament are carried out smoothly and its dignity is intact. The Constitution itself has made certain provisions to ensure smooth conduct of business. The presiding officer of the legislature is the final authority in matters of regulating the business of the legislature.

There is one more way in which the presiding officers control the behaviour of the members. You may have heard about the anti-defection law. Most of the members of the legislatures are elected on the ticket of some political party. What would happen if they decide to leave the party after getting elected? For many years after independence, this issue was unresolved. Finally there was an agreement among the parties that a legislator who is elected on one party's ticket must be restricted from 'defecting' to another party. An amendment to the Constitution was made (52nd amendment act) in 1985. This is known as anti-defection amendment. It has also been subsequently modified by the 91st amendment. The presiding officer of the House is the authority who takes final decisions on all such cases. If it is proved that a member has 'defected', then such member loses the membership of the House. Besides, such a person is also disqualified from holding any political office like ministership, etc.

What is defection? If a member remains absent in the House when asked by the party leadership to remain present or votes against the instructions of the party or voluntarily leaves the membership of the party, it is deemed as defection.

Experience of the past twenty years shows that the anti-defection amendment has not been able to curb defections, but it has given additional powers to the party leadership and the presiding officers of the legislatures over the members.

### Conclusion

Have you watched the live telecast of the proceeding of the Parliament? You will find that our Parliament is truly a rainbow of colourful dresses symbolising different regions of the country. Members speak different languages in the course of the proceedings. They come from various castes, religions and sects. They often fight bitterly. Many times an impression is created that they are wasting the time and money of the nation. But we have seen in this chapter that these same parliamentarians can effectively control the executive. They can express the interests of various sections of our society. On account of its composition, Legislature is the most representative of all organs of government. The sheer presence of members of diverse social backgrounds makes the legislatures more representative and potentially more responsive to people's expectations. In a parliamentary democracy, legislature, as a body representing the wishes of the people

occupies a high position of power and responsibility. Herein lies the democratic potential of the Parliament.

## Chapter 6 Judiciary

Many times, courts are seen only as arbitrators in disputes between individuals or private parties. But judiciary performs some political functions also. Judiciary is an important organ of the government. The Supreme Court of India is in fact, one of the very powerful courts in the world. Right from 1950 the judiciary has played an important role in interpreting and in protecting the Constitution. In this chapter you will study the role and importance of the judiciary. In the chapter on fundamental rights you have already read that the judiciary is very important for protecting our rights. After studying this chapter, you would be able to understand

- the meaning of independence of judiciary;
- the role of Indian judiciary in protecting our rights;
- the role of the judiciary in interpreting the Constitution; and
- the relationship between the judiciary and the Parliament of India.

Why do we need an independent judiciary?

In any society, disputes are bound to arise between individuals, between groups and between individuals or groups and government. All such disputes must be settled by an independent body in accordance with the principle of rule of law. This idea of rule of law implies that all individuals — rich and poor, men or women, forward or backward castes — are subjected to the same law. The principal role of the judiciary is to protect rule of law and ensure supremacy of law. It safeguards rights of the individual, settles disputes in accordance with the law and ensures that democracy does not give way to individual or group dictatorship. In order to be able to do all this, it is necessary that the judiciary is independent of any political pressures. What is meant by an independent judiciary? How is this independence ensured?

### Independence of Judiciary

Simply stated independence of judiciary means that

- the other organs of the government like the executive and legislature must not restrain the functioning of the judiciary in such a way that it is unable to do justice.
- the other organs of the government should not interfere with the decision of the judiciary.
- judges must be able to perform their functions without fear or favour.

Independence of the judiciary does not imply arbitrariness or absence of accountability. Judiciary is a part of the democratic political structure of the country. It is therefore accountable to the Constitution, to the democratic traditions and to the people of the country. How can the independence of judiciary be provided and protected?

The Indian Constitution has ensured the independence of the judiciary through a number of measures. The legislature is not involved in the process of appointment of judges. Thus, it was believed that party politics would not play a role in the process of appointments. In order to be appointed as a judge, a person must have experience as a lawyer and/or must be well versed in law. Political opinions of the person or his/her political loyalty should not be the criteria for appointments to judiciary.

The judges have a fixed tenure. They hold office till reaching the age of retirement. Only in exceptional cases, judges may be removed. But otherwise, they have security of tenure. Security of tenure ensures that judges could function without fear or favour. The Constitution prescribes a very difficult procedure for removal of judges. The Constitution makers believed that a difficult procedure of removal would provide security of office to the members of judiciary.

The judiciary is not financially dependent on either the executive or legislature. The Constitution provides that the salaries and allowances of the judges are not subjected to the approval of the legislature. The actions and decisions of the judges are immune from personal criticisms. The judiciary has the power to penalise those who are found guilty of contempt of court. This authority of the court is seen as an effective protection to the judges from unfair criticism. Parliament cannot discuss the conduct of the judges except when the proceeding to remove a judge is being carried out. This gives the judiciary independence to adjudicate without fear of being criticised.

### Appointment of Judges

The appointment of judges has never been free from political controversy. It is part of the political process. It makes a difference who serves in the Supreme Court and High Court—a difference in how the Constitution is interpreted. The political philosophy of the judges, their views about active and assertive judiciary or controlled and committed judiciary have an impact on the fate of the legislations enacted. Council of Ministers, Governors and Chief Ministers and Chief Justice of India—all influence the process of judicial appointment.

As far as the appointment of the Chief Justice of India (CJI) is concerned, over the years, a convention had developed whereby the senior-most judge of the Supreme Court was appointed as the Chief Justice of India. This convention was however broken twice. In 1973 A. N. Ray was appointed as CJI superseding three senior Judges. Again, Justice M.H. Beg was appointed superseding Justice H.R. Khanna (1975).

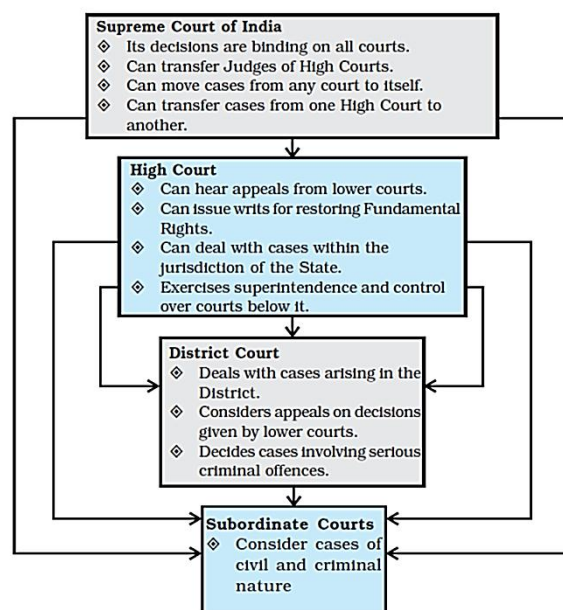
The other Judges of the Supreme Court and the High Court are appointed by the President after 'consulting' the CJI. This, in effect, meant that the final decisions in matters of appointment rested with the Council of Ministers. What then, was the status of the consultation with the Chief Justice?

This matter came up before the Supreme Court again and again between 1982 and 1998. Initially, the court felt that role of the Chief Justice was purely consultative. Then it took the view that the opinion of the Chief Justice must be followed by the President. Finally, the Supreme Court has come up with a novel procedure: it has suggested that the Chief Justice should recommend names of persons to be appointed in consultation with four senior-most judges of the Court. Thus, the Supreme Court has established the principle of collegiality in making recommendations for appointments. At the moment therefore, in matters of appointment the decision of the group of senior judges of the Supreme Court carries greater weight. Thus, in matters of appointment to the judiciary, the Supreme Court and the Council of Ministers play an important role.

### Removal of Judges

The removal of judges of the Supreme Court and the High Courts is also extremely difficult. A judge of the

Supreme Court or High Court can be removed only on the ground of proven misbehaviour or incapacity. A motion containing the charges against the judge must be approved by special majority in both Houses of the Parliament. Do you remember what special majority means? We have studied this in the chapter on Elections. It is clear from this procedure that removal of a judge is a very difficult procedure and unless there is a general consensus among Members of the Parliament, a judge cannot be removed. It should also be noted that while in making appointments, the executive plays a crucial role; the legislature has the powers of removal. This has ensured both balance of power and independence of the judiciary. So far, only one case of removal of a judge of the Supreme Court came up for consideration before the Parliament. In that case, though the motion got two-thirds majority, it did not have the support of the majority of the total strength of the House and therefore, the judge was not removed.



### Unsuccessful Attempt to Remove a judge

*In 1991 the first-ever motion to remove a Supreme Court Justice was signed by 108 members of Parliament. Justice Ramaswamy, during his tenure as the Chief Justice of the Punjab High Court was accused of misappropriating funds. In 1992, a year after the Parliament had started the impeachment proceedings, a high-profile inquiry commission consisting of Judges of Supreme Court found Justice V. Ramaswamy "guilty of wilful and gross misuses of office... and moral turpitude by using public funds for private purposes and reckless disregard of statutory rules" while serving as Chief Justice of Punjab and Haryana. Despite this strong indictment, Ramaswamy survived the parliamentary motion recommending removal. The motion recommending his removal got the required two-third majority among the members who were present and voting, but the Congress party abstained from voting in the House. Therefore, the motion could not get the support of one-half of the total strength of the House.*

### Structure of the Judiciary

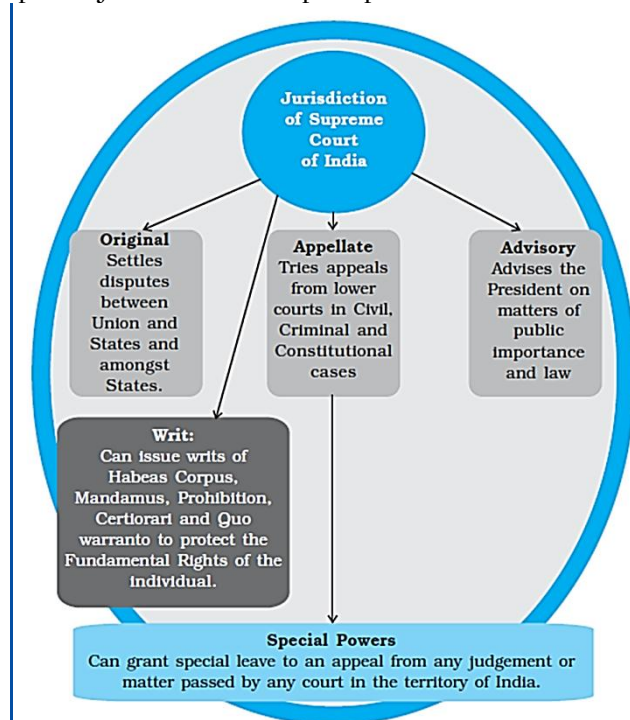
The Constitution of India provides for a single integrated judicial system. This means that unlike some other federal countries of the world, India does not have separate State courts. The structure of the judiciary in India is pyramidal with the Supreme Court at the top, High Courts below them and district and subordinate courts at the lowest level (see the diagram below). The



lower courts function under the direct superintendence of the higher courts.

## Jurisdiction of Supreme Court

The Supreme Court of India is one of the very powerful courts anywhere in the world. However, it functions within the limitations imposed by the Constitution. The functions and responsibilities of the Supreme Court are defined by the Constitution. The Supreme Court has specific jurisdiction or scope of powers.



## Original Jurisdiction

Original jurisdiction means cases that can be directly considered by the Supreme Court without going to the lower courts before that. From the diagram above, you will notice that cases involving federal relations go directly to the Supreme Court. The Original Jurisdiction of the Supreme Court establishes it as an umpire in all disputes regarding federal matters. In any federal country, legal disputes are bound to arise between the Union and the States; and among the States themselves. The power to resolve such cases is entrusted to the Supreme Court of India. It is called original jurisdiction because the Supreme Court alone has the power to deal with such cases. Neither the High Courts nor the lower courts can deal with such cases. In this capacity, the Supreme Court not just settles disputes but also interprets the powers of Union and State government as laid down in the Constitution.

## Writ jurisdiction

As you have already studied in the chapter on fundamental rights, any individual, whose fundamental right has been violated, can directly move the Supreme Court for remedy. The Supreme Court can give special orders in the form of writs. The High Courts can also issue writs, but the persons whose rights are violated have the choice of either approaching the High Court or approaching the Supreme Court directly. Through such writs, the Court can give orders to the executive to act or not to act in a particular way.

## Appellate Jurisdiction

The Supreme Court is the highest court of appeal. A person can appeal to the Supreme Court against the decisions of the High Court. However, High Court must certify that the case is fit for appeal, that is to say that it

involves a serious matter of interpretation of law or Constitution. In addition, in criminal cases, if the lower court has sentenced a person to death then an appeal can be made to the High Court or Supreme Court. Of course, the Supreme Court holds the powers to decide whether to admit appeals even when appeal is not allowed by the High Court. Appellate jurisdiction means that the Supreme Court will reconsider the case and the legal issues involved in it. If the Court thinks that the law or the Constitution has a different meaning from what the lower courts understood, then the Supreme Court will change the ruling and along with that also give new interpretation of the provision involved. The High Courts too, have appellate jurisdiction over the decisions given by courts below them.

## Advisory Jurisdiction

In addition to original and appellate jurisdiction, the Supreme Court of India possesses advisory jurisdiction also. This means that the President of India can refer any matter that is of public importance or that which involves interpretation of Constitution to Supreme Court for advice. However, the Supreme Court is not bound to give advice on such matters and the President is not bound to accept such an advice.

What then is the utility of the advisory powers of the Supreme Court? The utility is two-fold. In the first place, it allows the government to seek legal opinion on a matter of importance before taking action on it. This may prevent unnecessary litigations later. Secondly, in the light of the advice of the Supreme Court, the government can make suitable changes in its action or legislations.

**Article 144 ..... All authorities, civil and judicial, in the territory of India shall act in aid of the Supreme Court.**

**Article 137 ..... the Supreme Court shall have power to review any judgment pronounced or order made by it.**

Read the articles quoted above. These articles help us to understand the unified nature of our judiciary and the powers of the Supreme Court. Decisions made by the Supreme Court are binding on all other courts within the territory of India. Orders passed by it are enforceable throughout the length and breadth of the country. The Supreme Court itself is not bound by its decision and can at any time review it. Besides, if there is a case of contempt of the Supreme Court, then the Supreme Court itself decides such a case.

## Judicial Activism

Have you heard of the term judicial activism? Or, Public Interest Litigation?

Both these terms are often used in the discussions about judiciary in recent times. Many people think that these two things have revolutionised the functioning of judiciary and made it more people-friendly.

The chief instrument through which judicial activism has flourished in India is Public Interest Litigation (PIL) or Social Action Litigation (SAL). What is PIL or SAL? How and when did it emerge? In normal course of law, an individual can approach the courts only if he/she has been personally aggrieved. That is to say, a person whose rights have been violated, or who is involved in a dispute, could move the court of law. This concept underwent a change around 1979. In 1979, the Court set the trend when it decided to hear a case where the case was filed not by the aggrieved persons but by others on their behalf. As this case involved a consideration of an issue of public interest, it and such other cases came to

be known as public interest litigations. Around the same time, the Supreme Court also took up the case about rights of prisoners. This opened the gates for large number of cases where public spirited citizens and voluntary organisations sought judicial intervention for protection of existing rights, betterment of life conditions of the poor, protection of the environment, and many other issues in the interest of the public. PIL has become the most important vehicle of judicial activism.

Judiciary, which is an institution that traditionally confined to responding to cases brought before it, began considering many cases merely on the basis of newspaper reports and postal complaints received by the court. Therefore, the term judicial activism became the more popular description of the role of the judiciary.

### Some Early PILs

• In 1979, newspapers published reports about 'under trials'. There were many prisoners in Bihar who had spent long years in jail, longer than what they would have spent if they had been punished for the offences for which they were arrested. This report prompted an advocate to file a petition. The Supreme Court heard this case. It became famous as one of the early Public Interest Litigations (PILs). This was the *Hussainara Khatoon vs. Bihar case*.

• In 1980, a prison inmate of the Tihar jail managed to send a scribbled piece of paper to Justice Krishna Iyer of the Supreme Court narrating physical torture of the prisoners. The judge got it converted into a petition. Though later on, the Court abandoned the practice of considering letters, this case, known as *Sunil Batra vs. Delhi Administration* (1980) also became one of the pioneers of public interest litigation.

Through the PIL, the court has expanded the idea of rights. Clean air, unpolluted water, decent living etc. are rights for the entire society. Therefore, it was felt by the courts that individuals as parts of the society must have the right to seek justice wherever such rights were violated.

Secondly, through PIL and judicial activism of the post-1980 period, the judiciary has also shown readiness to take into consideration rights of those sections who cannot easily approach the courts. For this purpose, the judiciary allowed public spirited citizens, social organisations and lawyers to file petitions on behalf of the needy and the deprived.

Judicial activism has had manifold impact on the political system. It has democratised the judicial system by giving not just to individuals but also groups access to the courts. It has forced executive accountability. It has also made an attempt to make the electoral system much more free and fair. The court asked candidates contesting elections to file affidavits indicating their assets and income along with educational qualifications so that the people could elect their representatives based on accurate knowledge.

There is however a negative side to the large number of PILs and the idea of a pro-active judiciary. In the first place it has overburdened the courts. Secondly, judicial activism has blurred the line of distinction between the executive and legislature on the one hand and the judiciary on the other. The court has been involved in resolving questions which belong to the executive.

Thus, for instance, reducing air or sound pollution or investigating cases of corruption or bringing about electoral reform is not exactly the duty of the Judiciary. These are matters to be handled by the administration under the supervision of the legislatures. Therefore,

some people feel that judicial activism has made the balance among the three organs of government very delicate. Democratic government is based on each organ of government respecting the powers and jurisdiction of the others. Judicial activism may be creating strains on this democratic principle.

### Judiciary and Rights

We have already seen that the judiciary is entrusted with the task of protecting rights of individuals. The Constitution provides two ways in which the Supreme Court can remedy the violation of rights.

- First it can restore fundamental rights by issuing writs of Habeas Corpus; mandamus etc. (article 32). The High Courts also have the power to issue such writs (article 226).

- Secondly, the Supreme Court can declare the concerned law as unconstitutional and therefore non-operational (article 13).

Together these two provisions of the Constitution establish the Supreme Court as the protector of fundamental rights of the citizen on the one hand and interpreter of Constitution on the other. The second of the two ways mentioned above involves judicial review. Perhaps the most important power of the Supreme Court is the power of judicial review. Judicial Review means the power of the Supreme Court (or High Courts) to examine the constitutionality of any law if the Court arrives at the conclusion that the law is inconsistent with the provisions of the Constitution, such a law is declared as unconstitutional and inapplicable. The term judicial review is nowhere mentioned in the Constitution.

However, the fact that India has a written constitution and the Supreme Court can strike down a law that goes against fundamental rights, implicitly gives the Supreme Court the power of judicial review.

Besides, as we saw in the section on jurisdiction of the Supreme Court, in the case of federal relations too, the Supreme Court can use the review powers if a law is inconsistent with the distribution of powers laid down by the Constitution. Suppose, the central government makes a law, which according to some States, concerns a subject from the State list. Then the States can go to the Supreme Court and if the court agrees with them, it would declare that the law is unconstitutional. In this sense, the review power of the Supreme Court includes power to review legislations on the ground that they violate fundamental rights or on the ground that they violate the federal distribution of powers. The review power extends to the laws passed by State legislatures also.

Together, the writ powers and the review power of the Court make judiciary very powerful. In particular, the review power means that the judiciary can interpret the Constitution and the laws passed by the legislature. Many people think that this feature enables the judiciary to protect the Constitution effectively and also to protect the rights of citizens. The practice of entertaining PILs has further added to the powers of the judiciary in protecting rights of citizens.

Did you know that the practice of public interest litigation is now becoming more and more acceptable in many other countries? While many courts across the world, particularly in South Asia and Africa practice some form of judicial activism comparable to that of the Indian judiciary, the constitution of South Africa has incorporated public interest litigation in its bill of rights. Thus, in South Africa, it is a fundamental right of the citizen to bring before the Constitutional Court, cases of violation of other persons' rights.

Do you remember that in the chapter on rights we mentioned the right against exploitation? This right prohibits forced labour, trade in human flesh and prohibits employment of children in hazardous jobs. But the question is: how could those, whose rights were violated, approach the court? PIL and judicial activism made it possible for courts to consider these violations. Thus, the court considered a whole set of cases: the blinding of the jail inmates by the police, inhuman working conditions in stone quarries, sexual exploitation of children, and so on. This trend has made rights really meaningful for the poor and disadvantaged sections.

## Judiciary and Parliament

Apart from taking a very active stand on the matter of rights, the court has been active in seeking to prevent subversion of the Constitution through political practice. Thus, areas that were considered beyond the scope of judicial review such as powers of the President and Governor were brought under the purview of the courts.

There are many other instances in which the Supreme Court actively involved itself in the administration of justice by giving directions to executive agencies. Thus, it gave directions to CBI to initiate investigations against politicians and bureaucrats in the hawala case, the Narasimha Rao case, illegal allotment of petrol pumps case etc. You may have heard about some of these cases. Many of these instances are the products of judicial activism.

The Indian Constitution is based on a delicate principle of limited separation of powers and checks and balances. This means that each organ of the government has a clear area of functioning. Thus, the Parliament is supreme in making laws and amending the Constitution, the executive is supreme in implementing them while the judiciary is supreme in settling disputes and deciding whether the laws that have been made are in accordance with the provisions of the Constitution. Despite such clear cut division of power the conflict between the Parliament and judiciary, and executive and the judiciary has remained a recurrent theme in Indian politics.

We have already mentioned the differences that emerged between the Parliament and the judiciary over right to property and the Parliament's power to amend the Constitution. Let us recapitulate that briefly:

Immediately after the implementation of the Constitution began, a controversy arose over the Parliament's power to restrict right to property. The Parliament wanted to put some restrictions on the right to hold property so that land reforms could be implemented. The Court held that the Parliament cannot thus restrict fundamental rights. The Parliament then tried to amend the Constitution. But the Court said that even through an amendment, a fundamental right cannot be abridged.

The following issues were at the centre of the controversy between the Parliament and the judiciary.

- What is the scope of right to private property?
  - What is the scope of the Parliament's power to curtail, abridge or abrogate fundamental rights?
  - What is the scope of the Parliament's power to amend the constitution?
  - Can the Parliament make laws that abridge fundamental rights while enforcing directive principles?
- While there can be no two opinions on the need for the maintenance of judicial independence, .....it is also necessary to keep in view one important principle. The

doctrine of independence is not to be raised to the level of dogma so as to enable the Judiciary to function as a kind of super-Legislature or super-Executive. The Judiciary is there to interpret the Constitution or adjudicate upon rights ....

During the period 1967 and 1973, this controversy became very serious. Apart from land reform laws, laws enforcing preventive detention, laws governing reservations in jobs, regulations acquiring private property for public purposes, and laws deciding the compensation for such acquisition of private property were some instances of the conflict between the legislature and the judiciary.

In 1973, the Supreme Court gave a decision that has become very important in regulating the relations between the Parliament and the Judiciary since then. This case is famous as the Kesavananda Bharati case. In this case, the Court ruled that there is a basic structure of the Constitution and nobody—not even the Parliament (through amendment)—can violate the basic structure. The Court did two more things. First, it said that right to property (the disputed issue) was not part of basic structure and therefore could be suitably abridged. Secondly, the Court reserved to itself the right to decide whether various matters are part of the basic structure of the Constitution. This case is perhaps the best example of how judiciary uses its power to interpret the Constitution.

This ruling has changed the nature of conflicts between the legislature and the judiciary. As we studied earlier, the right to property was taken away from the list of fundamental rights in 1979 and this also helped in changing the nature of the relationship between these two organs of government.

Some issues still remain a bone of contention between the two — can the judiciary intervene in and regulate the functioning of the legislatures? In the parliamentary system, the legislature has the power to govern itself and regulate the behaviour of its members. Thus, the legislature can punish a person who the legislature holds guilty of breaching privileges of the legislature. Can a person who is held guilty for breach of parliamentary privileges seek protection of the courts? Can a member of the legislature against whom the legislature has taken disciplinary action get protection from the court? These issues are unresolved and are matters of potential conflict between the two. Similarly, the Constitution provides that the conduct of judges cannot be discussed in the Parliament. There have been several instances where the Parliament and State legislatures have cast aspersions on the functioning of the judiciary. Similarly, the judiciary too has criticised the legislatures and issued instructions to the legislatures about the conduct of legislative business. The legislatures see this as violating the principle of parliamentary sovereignty. These issues indicate how delicate the balance between any two organs of the government is and how important it is for each organ of the government in a democracy to respect the authority of others.

## Conclusion

In this chapter, we have studied the role of the judiciary in our democratic structure. In spite of the tensions that arose from time to time between the judiciary and the executive and the legislature, the prestige of the judiciary has increased considerably. At the same time, there are many more expectations from the judiciary. Ordinary citizens also wonder how it is possible for many people to get easy acquittals and how witnesses change their testimonies to suit the wealthy and the



mighty. These are some issues about which our judiciary is concerned too.

You have seen in this chapter that judiciary in India is a very powerful institution. This power has generated much awe and many hopes from it. Judiciary in India is also known for its independence. Through various decisions, the judiciary has given new interpretations to the Constitution and protected the rights of citizens. As we saw in this chapter, democracy hinges on the delicate balance of power between the judiciary and the Parliament and both institutions have to function within the limitations set by the Constitution.

## Chapter 7 Federalism

After studying this chapter you will be able to understand the following:

- what is Federalism;
- the federal provisions in the Indian Constitution;
- the issues involved in the relations between the centre and the States; and
- the special provisions for certain States having a distinct composition and historical features.

### What is Federalism?

USSR was one of the world's super powers, but after 1989 it simply broke up into several independent countries. One of the major reasons for its break up was the excessive centralisation and concentration of power, and the domination of Russia over other regions with independent languages and cultures of their own e.g. Uzbekistan. Some other countries like Czechoslovakia, Yugoslavia, and Pakistan also had to face a division of the country. Canada came very close to a break up between the English-speaking and the French-speaking regions of that country. Isn't it a great achievement that India, which emerged as an independent nation-state in 1947 after a painful partition, has remained united over six decades of its independent existence? What accounts for this achievement? Can we attribute it to the federal structure of governance that we in India adopted through our Constitution? All the countries mentioned above, were federations. Yet they could not remain united.

Therefore, apart from adopting a federal constitution, the nature of that federal system and the practice of federalism must also be important factors.

India is a land of continental proportions and immense diversities. There are more than 20 major languages and several hundred minor ones. It is the home of several major religions. There are several million indigenous peoples living in different parts of the country. In spite of all these diversities we share a common land mass. We have also participated in a common history, especially, when we fought for independence. We also share many other important features. This has led our national leaders to visualise India as a country where there is unity in diversity. Sometimes it is described as unity with diversity.

Federalism does not consist of a set of fixed principles, which are applied, to different historical situations. Rather, federalism as a principle of government has evolved differently in different situations. American federalism – one of the first major attempts to build a federal polity – is different from German or Indian federalism. But there are also a few key ideas and concepts associated with federalism.

- Essentially, federalism is an institutional mechanism to

accommodate two sets of polities—one at the regional level and the other at the national level. Each government is autonomous in its own sphere. In some federal countries, there is even a system of dual citizenship. India has only a single citizenship.

- The people likewise, have two sets of identities and loyalties—they belong to the region as well as the nation, for example we are Gujaratis or Jharkhandis as well as Indians. Each level of the polity has distinct powers and responsibilities and has a separate system of government.

- The details of this dual system of government are generally spelt out in a written constitution, which is considered to be supreme and which is also the source of the power of both sets of government. Certain subjects, which concern the nation as a whole, for example, defence or currency, are the responsibility of the union or central government. Regional or local matters are the responsibility of the regional or State government.

- To prevent conflicts between the centre and the State, there is an independent judiciary to settle disputes. The judiciary has the powers to resolve disputes between the central government and the States on legal matters about the division of power.

Real politics, culture, ideology and history determine the actual working of a federation. A culture of trust, cooperation, mutual respect and restraint helps federations to function smoothly. Political parties also determine the way a constitution would work. If any single unit or State or linguistic group or ideology comes to dominate the entire federation it could generate a deep resentment among people or its units not sharing the dominant voice. These situations could lead to demands for secession by the aggrieved units or could even result in civil wars. Many countries are embroiled in such conflict situations.

### Federalism in the Indian Constitution

Even before independence, most leaders of our national movement were aware that to govern a large country like ours, it would be necessary to divide the powers between provinces and the central government. There was also awareness that Indian society had regional diversity and linguistic diversity. This diversity needed recognition. People of different regions and languages had to share power and in each region, people of that region should govern themselves. This was only logical if we wanted a democratic government.]

The only question was what should be the extent of powers to be enjoyed by the regional governments. In view of the agitation of the Muslim League for greater representation to the Muslims, a compromise formula to give very large powers to the regions was discussed during the negotiations before Partition. Once the decision to partition India was taken, the Constituent Assembly decided to frame a government that would be based on the principles of unity and cooperation between the centre and the States and separate powers to the States. The most important feature of the federal system adopted by the Indian Constitution is the principle that relations between the States and the centre would be based on cooperation. Thus, while recognising diversity, the Constitution emphasised unity.

**Article 1: (1) India, that is Bharat, shall be a Union of States.**

**(2) The States and the territories thereof shall be as specified in the First Schedule.**

Do you know for example, that the Constitution of India

does not even mention the word federation? This is how the Constitution describes India —

### Division of powers

There are two sets of government created by the Indian Constitution: one for the entire nation called the union government (central government) and one for each unit or State called the State government. Both of these have a constitutional status and clearly identified area of activity. If there is any dispute about which powers come under the control of the union and which under the States, this can be resolved by the Judiciary on the basis of the constitutional provisions. The Constitution clearly demarcates subjects, which are under the exclusive domain of the Union and those under the States. (Study the chart given on the next page carefully. It shows how powers are distributed between the centre and the States.) One of the important aspects of this division of powers is that economic and financial powers are centralised in the hands of the central government by the Constitution. The States have immense responsibilities but very meagre revenue sources.

### Federalism with a strong central government

It is generally accepted that the Indian Constitution has created a strong central government. India is a country of continental dimensions with immense diversities and social problems. The framers of the Constitution believed that we required a federal constitution that would accommodate diversities. But they also wanted to create a strong centre to stem disintegration and bring about social and political change. It was necessary for the centre to have such powers because India at the time of independence was not only divided into provinces created by the British; but there were more than 500 princely states which had to be integrated into existing States or new States had to be created. Let me tell my honourable friends in the House that the drift ..... in all constitutions has been towards the centre..... because of circumstances that have now come into being that states have become, whether..federal or unitary, welfare states from being police states and the ultimate responsibility as for economic well being of the country has become the paramount responsibility of the Centres.

Besides the concern for unity, the makers of the Constitution also believed that the socio-economic problems of the country needed to be handled by a strong central government in cooperation with the States. Poverty, illiteracy and inequalities of wealth were some of the problems that required planning and coordination. Thus, the concerns for unity and development prompted the makers of the Constitution to create a strong central government.

Let us look at the important provisions that create a strong central government:

- The very existence of a State including its territorial integrity is in the hands of Parliament. The Parliament is empowered to 'form a new State by separation of territory from any State or by uniting two or more States...'. It can also alter the boundary of any State or even its name. The Constitution provides for some safeguards by way of securing the view of the concerned State legislature.
- The Constitution has certain very powerful emergency provisions, which can turn our federal polity into a highly centralised system once emergency is declared. During an emergency, power becomes lawfully

centralised. Parliament also assumes the power to make laws on subjects within the jurisdiction of the States.

- Even during normal circumstances, the central government has very effective financial powers and responsibilities. In the first place, items generating revenue are under the control of the central government. Thus, the central government has many revenue sources and the States are mostly dependent on the grants and financial assistance from the centre. Secondly, India adopted planning as the instrument of rapid economic progress and development after independence. Planning led to considerable centralisation of economic decision making. Planning commission appointed by the union government is the coordinating machinery that controls and supervises the resources management of the States. Besides, the Union government uses its discretion to give grants and loans to States. This distribution of economic resources is considered lopsided and has led to charges of discrimination against States ruled by an opposition party.

- As you will study later, the Governor has certain powers to recommend dismissal of the State government and the dissolution of the Assembly. Besides, even in normal circumstances, the Governor has the power to reserve a bill passed by the State legislature, for the assent of the President. This gives the central government an opportunity to delay the State legislation and also to examine such bills and veto them completely.

- There may be occasions when the situation may demand that the central government needs to legislate on matters from the State list. This is possible if the move is ratified by the Rajya Sabha. The Constitution clearly states that executive powers of the centre are superior to the executive powers of the States. Furthermore, the central government may choose to give instructions to the State government. The following extract from an article of the Constitution makes this clear.

**Article 257 (1): The executive power of every State shall be so exercised as not to impede or prejudice the exercise of the executive power of the Union, and the executive power of the Union shall extend to the giving of such directions to a State as may appear to the Government of India to be necessary for that purpose.**

- You have already studied in the chapter on executive that we have an integrated administrative system. The all-India services are common to the entire territory of India and officers chosen for these services serve in the administration of the States. Thus, an IAS officer who becomes the collector or an IPS officer who serves as the Commissioner of Police, are under the control of the central government. States can neither take disciplinary action nor can they remove these officers from service.
- Articles 33 and 34 authorise the Parliament to protect persons in the service of the union or a state in respect of any action taken by them during martial law to maintain or restore order. This provisions further strengthens the powers of the union government. The Armed Forces Special Powers Act has been made on the basis of these provisions. This Act has created tensions between the people and the armed forces on some occasions.

### Conflicts in India's federal system

In the previous section, we have seen that the Constitution has vested very strong powers in the centre. Thus, the Constitution recognises the separate

identity of the regions and yet gives more powers to the centre. Once the principle of identity of the State is accepted, it is quite natural that the States would expect a greater role and powers in the governance of the State and the country as a whole. This leads to various demands from the States. From time to time, States have demanded that they should be given more powers and more autonomy. This leads to tensions and conflicts in the relations between the centre and the States. While the legal disputes between the centre and the States (or between States) can be resolved by the judiciary, demands for autonomy are of political nature and need to be resolved through negotiations.

### **Centre-State relations**

The Constitution is only a framework or a skeleton, its flesh and blood is provided by the actual processes of politics. Hence federalism in India has to a large extent been influenced by the changing nature of the political process. In the 1950s and early 1960s the foundation of our federalism was laid under Jawaharlal Nehru. It was also a period of Congress dominance over the centre as well as the States. Except on the issue of formation of new States, the relations between the centre and the States remained quite normal during this period. The States were hopeful that they would be making progress with the help of the grants-in-aid from the centre. Besides, there was considerable optimism about the policies of socio-economic development designed by the centre.

In the middle of the 1960s Congress dominance declined somewhat and in a large number of States opposition parties came to power. It resulted in demands for greater powers and greater autonomy to the States. In fact, these demands were a direct fallout of the fact that different parties were ruling at the centre and in many States. So, the State governments were protesting against what they saw as unnecessary interference in their governments by the Congress government at the centre. The Congress too, was not very comfortable with the idea of dealing with governments led by opposition parties. This peculiar political context gave birth to a discussion about the concept of autonomy under a federal system. Finally, since the 1990s, Congress dominance has largely ended and we have entered an era of coalition politics especially at the centre. In the States too, different parties, both national and regional, have come to power. This has resulted in a greater say for the States, a respect for diversity and the beginning of a more mature federalism. Thus, it is in the second phase that the issue of autonomy became very potent politically.

### **Demands for autonomy**

Many States and even many political parties have, from time to time, demanded that States should have more autonomy vis-à-vis the central government. However, 'autonomy' refers to different things for different States and parties.

- Sometimes, these demands expect that the division of powers should be changed in favour of the States and more powers and important powers be assigned to the States. Many States (Tamil Nadu, Punjab, West Bengal,) and many parties (DMK, Akali Dal, CPI-M) have made demands of autonomy from time to time.
- Another demand is that States should have independent sources of revenue and greater control over the resources. This is also known as financial autonomy. In 1977 the Left Front Government in West Bengal brought out a document demanding a

restructuring of centre-State relations in India. In the autonomy demands of Tamil Nadu and Punjab also, there was an implicit support to the idea of greater financial powers.

- The third aspect of the autonomy demands relates to administrative powers of the States. States resent the control of the centre over the administrative machinery.
- Fourthly, autonomy demands may also be related to cultural and linguistic issues. The opposition to the domination of Hindi (in Tamil Nadu) or demand for advancing the Punjabi language and culture are instances of this. Some States also feel that there is a domination of the Hindi-speaking areas over the others. In fact, during the decade of 1960, there were agitations in some States against the imposition of the Hindi language.

### **Role of Governors and President's Rule**

The role of Governors has always been a controversial issue between the States and the central government. The Governor is not an elected office holder. Many Governors have been retired military officers or civil servants or politicians. Besides, the Governor is appointed by the central government and therefore, actions of the Governor are often viewed as interference by the Central government in the functioning of the State government. When two different parties are in power at the centre and the State, the role of the Governor becomes even more controversial. The Sarkaria Commission that was appointed by the central government (1983; it submitted its report in 1988) to examine the issues relating to centre-State relations, recommended that appointments of Governors should be strictly non-partisan. Powers and role of the Governor become controversial for one more reason. One of the most controversial articles in the Constitution is Article 356, which provides for President's rule in any State. This provision is to be applied, when 'a situation has arisen in which the Government of the State cannot be carried on in accordance with the provisions of this Constitution.' It results in the takeover of the State government by the Union government. The President's proclamation has to be ratified by Parliament. President's rule can be extended till three years. The Governor has the power to recommend the dismissal of the State government and suspension or dissolution of State assembly. This has led to many conflicts. In some cases, State governments were dismissed even when they had a majority in the legislature, as had happened in Kerala in 1959 or without testing their majority, as happened in several other States after 1967. Some cases went to the Supreme Court and the Court has ruled that constitutional validity of the decision to impose President's rule can be examined by the judiciary. Article 356 was very sparingly used till 1967. After 1967 many States had non-Congress governments and the Congress was in power at the centre. The centre has often used this provision to dismiss State governments or has used the office of the Governor to prevent the majority party or coalition from assuming office. For instance, the central government removed elected governments in Andhra Pradesh and Jammu and Kashmir in the decade of 1980s.

### **Demands for new States**

The other dimension of tension in our federal system has been the demand to create new States. The national movement not only created a pan-Indian national unity; it also generated distinct unity around a common



language, region and culture. Our national movement was also a movement for democracy. Therefore, in the course of the national movement itself, it was decided that as far as possible, States would be created on the basis of common cultural and linguistic identity. This ultimately led to the demand for the creation of linguistic States after independence. In December 1953, the States Reorganisation Commission was set up and it recommended the creation of linguistic States, at least for the major linguistic groups. In 1956, reorganisation of some States took place. This saw the beginning of the creation of linguistic States and the process is still continuing. Gujarat and Maharashtra were created in 1960; Punjab and Haryana were separated from each other in 1966. Later, the north-east region was reorganised and several new States were created like, Meghalaya, Manipur or Arunachal Pradesh were created.

### Interstate conflicts

While the States keep fighting with the centre over autonomy and other issues like the share in revenue resources, there have been many instances of disputes between two States or among more than two States. It is true that the judiciary acts as the arbitration mechanism on disputes of a legal nature but these disputes are in reality not just legal. They have political implications and therefore they can best be resolved only through negotiations and mutual understanding.

Broadly, two types of disputes keep recurring. One is the border dispute. States have certain claims over territories belonging to neighbouring States. Though language is the basis of defining boundaries of the States, often border areas would have populations speaking more than one language. So, it is not easy to resolve this dispute merely on the basis of linguistic majority. One of the long-standing border disputes is the dispute between Maharashtra and Karnataka over the city of Belgaum. Manipur and Nagaland too, have a long-standing border dispute. The carving out of Haryana from the erstwhile State of Punjab has led to dispute between the two States not only over border areas, but over the capital city of Chandigarh. This city today houses the capital of both these States. In 1985, the then Prime Minister Rajiv Gandhi reached an understanding with the leadership of Punjab. According to this understanding, Chandigarh was to be handed over to Punjab. But this has not happened yet.

While border disputes are more about sentiment, the disputes over the sharing of river waters are even more serious, because they are related to problems of drinking water and agriculture in the concerned States. You might have heard about the Cauvery water dispute. This is a major issue between Tamil Nadu and Karnataka. Farmers in both the States are dependent on Cauvery waters. Though there is a river water tribunal to settle water disputes, this dispute has reached the Supreme Court. In another similar dispute Gujarat, Madhya Pradesh and Maharashtra are battling over sharing the waters of Narmada river. Rivers are a major resource and therefore, disputes over river waters test the patience and cooperative spirit of the States.

### Special Provisions

The most extra-ordinary feature of the federal arrangement created in India is that many States get a differential treatment. We have already noted in the chapter on Legislature that the size and population of each State being different, an asymmetrical representation is provided in the Rajya Sabha. While

ensuring minimum representation to each of the smaller States, this arrangement also ensures that larger States would get more representation.

In the case of division of powers, too, the Constitution provides a division of powers that is common to all the States. And yet, the Constitution has some special provisions for some States given their peculiar social and historical circumstances. Most of the special provisions pertain to the north eastern States (Assam, Nagaland, Arunachal Pradesh, Mizoram, etc.) largely due to a sizeable indigenous tribal population with a distinct history and culture, which they wish to retain (Art 371). However, these provisions have not been able to stem alienation and the insurgency in parts of the region. Special provisions also exist for hilly States like Himachal Pradesh and some other States like Andhra Pradesh, Goa, Gujarat, Maharashtra and Sikkim.

### Conclusion

Federalism is like a rainbow, where each colour is separate, yet together they make a harmonious pattern. Federalism has to continuously maintain a difficult balance between the centre and the States. No legal or institutional formula can guarantee the smooth functioning of a federal polity. Ultimately, the people and the political process must develop a culture and a set of values and virtues like mutual trust, toleration and a spirit of cooperation. Federalism celebrates both unity as well as diversity. National unity cannot be built by streamlining differences. Such forced unity only generates greater social strife and alienation and tends finally to destroy unity. A responsive polity sensitive to diversities and to the demands for autonomy can alone be the basis of a cooperative federation.

## Chapter 8 Local Governments

In a democracy, it is not sufficient to have an elected government at the centre and at the State level. It is also necessary that even at the local level, there should be an elected government to look after local affairs. In this chapter, you will study the structure of local government in our country. You will also study the importance of the local governments and ways to give them independent powers. After studying this chapter, you will know:

- the importance of local government bodies;
- the provisions made by the 73rd and 74th amendments; and
- functions and responsibilities of the local government bodies.

Why local governments?

Local government is government at the village and district level. Local government is about government closest to the common people. Local government is about government that involves the day-to-day life and problems of ordinary citizens. Local government believes that local knowledge and local interest are essential ingredients for democratic decision making. They are also necessary for efficient and people-friendly administration. The advantage of local government is that it is so near the people. It is convenient for the people to approach the local government for solving their problems both quickly and with minimum cost. In the story of Geeta Rathore, we noticed that she was able to bring about a significant change in Jamonia Talab because of her pro-active role as Sarpanch of the Gram Panchayat. Vengaiwasal village

is able to still retain its land and the right to decide what to do with it because of the relentless efforts of its Gram Panchayat President and members. So, local governments can be very effective in protecting the local interests of the people.

Democracy is about meaningful participation. It is also about accountability. Strong and vibrant local governments ensure both active participation and purposeful accountability. Geeta Rathore's story is one of committed participation. Vengaivasal village Gram Panchayat's relentless efforts to secure its rights over its own land were an example of a mission to ensure accountability. It is at the level of local government that common citizens can be involved in decision making concerning their lives, their needs and above all their development.

It is necessary that in a democracy, tasks, which can be performed locally, should be left in the hands of the local people and their representatives. Common people are more familiar with their local government than with the government at the State or national level. They are also more concerned with what local government does or has failed to do as it has a direct bearing and impact on their day-to-day life. Thus, strengthening local government is like strengthening democratic processes.

### **Growth of Local Government in India**

In modern times, elected local government bodies were created after 1882. Lord Rippon, who was the Viceroy of India at that time, took the initiative in creating these bodies. They were called the local boards. However, due to slow progress in this regard, the Indian National Congress urged the government to take necessary steps to make all local bodies more effective. Following the Government of India Act 1919, village panchayats were established in a number of provinces. This trend continued after the Government of India Act of 1935. During India's freedom movement, Mahatma Gandhi had strongly pleaded for decentralisation of economic and political power. He believed that strengthening village panchayats was a means of effective decentralisation. All development initiatives must have local involvement in order to be successful. Panchayats therefore were looked upon as instruments of decentralisation and participatory democracy.

### **Local Governments in independent India**

Local governments got a fillip after the 73rd and 74th Constitution Amendment Acts. But even before that, some efforts in the direction of developing local government bodies had already taken place. First in the line was the Community Development Programme in 1952, which sought to promote people's participation in local development in a range of activities. In this background, a three-tier panchayati raj system of local government was recommended for the rural areas. Some States (like Gujarat, Maharashtra) adopted the system of elected local bodies around 1960. But in many States those local bodies did not have enough powers and functions to look after the local development. They were very much dependent on the State and central governments for financial assistance. Many States did not think it necessary to establish elected local bodies. In many instances, local bodies were dissolved and the local government was handed over to government officers. Many States had indirect elections to most local bodies. In many States, elections to the local bodies were postponed from time to time.

After 1987, a thorough review of the functioning of local government institutions was initiated. In 1989 the

P.K.Thungon Committee recommended constitutional recognition for the local government bodies. A constitutional amendment to provide for periodic elections to local government institutions, and enlistment of appropriate functions to them, along with funds, was recommended.

### **73<sup>rd</sup> and 74<sup>th</sup> Amendments**

In 1989, the central government introduced two constitutional amendments. These amendments aimed at strengthening local governments and ensuring an element of uniformity in their structure and functioning across the country.

The Constitution of Brazil has created States, Federal Districts and Municipal Councils. Each of these is assigned independent powers and jurisdiction. Just as the Republic cannot interfere in the affairs of the States (except on grounds provided by the constitution), states are prohibited from interfering in the affairs of the municipal councils. This provision protects the powers of the local government.

Later in 1992, the 73rd and 74th constitutional amendments were passed by the parliament. The 73rd Amendment is about rural local governments (which are also known as Panchayati Raj Institutions or PRIs) and the 74th amendment made the provisions relating to urban local government (Nagarpalikas). The 73rd and 74th Amendments came into force in 1993.

We have noticed earlier that local government is a 'State subject'. States are free to make their own laws on this subject. But once the Constitution was amended, the States had to change their laws about local bodies in order to bring these in conformity with the amended Constitution. They were given one year's time for making necessary changes in their respective State laws in the light of these amendments.

### **73rd Amendment**

Let us now examine the changes brought about by the 73rd amendment in Panchayati Raj institutions.

### **Three Tier Structure**

All States now have a uniform three tier Panchayati Raj structure. At the base is the 'Gram Panchayat'. A Gram Panchayat covers a village or group of villages. The intermediary level is the Mandal (also referred to as Block or Taluka). These bodies are called Mandal or Taluka Panchayats. The intermediary level body need not be constituted in smaller States. At the apex is the Zilla Panchayat covering the entire rural area of the District.

The amendment also made a provision for the mandatory creation of the Gram Sabha. The Gram Sabha would comprise of all the adult members registered as voters in the Panchayat area. Its role and functions are decided by State legislation.

### **Elections**

All the three levels of Panchayati Raj institutions are elected directly by the people. The term of each Panchayat body is five years. If the State government dissolves the Panchayat before the end of its five year term, fresh elections must be held within six months of such dissolution. This is an important provision that ensures the existence of elected local bodies. Before the 73rd amendment, in many States, there used to be indirect elections to the district bodies and there was no provision for immediate elections after dissolution.

### **Reservations**

One third of the positions in all panchayat institutions are reserved for women. Reservations for Scheduled

Castes and Scheduled Tribes are also provided for at all the three levels, in proportion to their population. If the States find it necessary, they can also provide for reservations for the other backward classes (OBCs). It is important to note that these reservations apply not merely to ordinary members in Panchayats but also to the positions of Chairpersons or 'Adhyakshas' at all the three levels. Further, reservation of one-third of the seats for women is not merely in the general category of seats but also within the seats reserved for Scheduled Castes, Scheduled Tribes and backward castes. This means that a seat may be reserved simultaneously for a woman candidate and one belonging to the Scheduled Castes or Scheduled Tribes. Thus, a Sarpanch would have to be a Dalit woman or an Adivasi woman.

### Transfer of Subjects

Twenty-nine subjects, which were earlier in the State list of subjects, are identified and listed in the Eleventh Schedule of the Constitution. These subjects are to be transferred to the Panchayati Raj institutions. These subjects were mostly linked to development and welfare functions at the local level. The actual transfer of these functions depends upon the State legislation. Each State decides how many of these twenty-nine subjects would be transferred to the local bodies.

**Article 243G. Powers, authority and responsibilities of Panchayats.—....., the Legislature of a State may, by law, endow the Panchayats with such powers and authority..... ..with respect to—.....the matters listed in the Eleventh Schedule.**

### Some subjects listed in the eleventh schedule

1. Agriculture, ...
3. Minor irrigation, water management and watershed development..
8. Small scale industries, including food processing industries.....
10. Rural housing.
11. Drinking water.....
13. Roads, culverts,....
14. Rural electrification,.....
16. Poverty alleviation programme.
17. Education, including primary and secondary schools.
18. Technical training and vocational education.
19. Adult and non-formal education.
20. Libraries.
21. Cultural activities.
22. Markets and fairs.
23. Health and sanitation, including hospitals, primary health centres and dispensaries.
24. Family welfare.
25. Women and child development.
26. Social welfare, ...
27. Welfare of the weaker sections, and in particular, of the Scheduled Castes and the Scheduled Tribes.
28. Public distribution system.....

The provisions of the 73rd amendment were not made applicable to the areas inhabited by the Adivasi populations in many States of India. In 1996, a separate act was passed extending the provisions of the Panchayat system to these areas. Many Adivasi communities have their traditional customs of managing common resources such as forests and small water reservoirs, etc. Therefore, the new act protects the rights of these communities to manage their resources in ways acceptable to them. For this purpose, more

powers are given to the Gram Sabhas of these areas and elected village panchayats have to get the consent of the Gram Sabha in many respects. The idea behind this act is that local traditions of self government should be protected while introducing modern elected bodies. This is only consistent with the spirit of diversity and decentralisation.

### State Election Commissioners

The State government is required to appoint a State Election Commissioner who would be responsible for conducting elections to the Panchayati Raj institutions. Earlier, this task was performed by the State administration which was under the control of the State government. Now, the office of the State Election Commissioner is autonomous like the Election Commissioner of India. However, the State Election Commissioner is an independent officer and is not linked to nor is this officer under the control of the Election Commission of India.

### State Finance Commission

The State government is also required to appoint a State Finance Commission once in five years. This Commission would examine the financial position of the local governments in the State. It would also review the distribution of revenues between the State and local governments on the one hand and between rural and urban local governments on the other. This innovation ensures that allocation of funds to the rural local governments will not be a political matter.

### 74th Amendment

As we mentioned earlier, the 74th amendment dealt with urban local bodies or Nagarpalikas. What is an urban area? It is very easy to identify a big city like Mumbai or Kolkata, but it is not so easy to say this about some very small urban areas that are somewhere between a village and a town. The Census of India defines an urban area as having: (i) a minimum population of 5000; (ii) at least 75 per cent of male working population engaged in non-agricultural occupations and (iii) a density of population of at least 400 persons per sq. km. As per the 2001 census, nearly 28% of India's population lives in urban areas. In many ways the 74th amendment is a repetition of the 73rd amendment, except that it applies to urban areas. All the provisions of the 73rd amendment relating to direct elections, reservations, transfer of subjects, State Election Commission and State Finance Commission are incorporated in the 74th amendment also and thus apply to Nagarpalikas. The Constitution also mandated the transfer of a list of functions from the State government to the urban local bodies. These functions have been listed in the Eleventh Schedule of the Constitution.

### Conclusion

This experience suggests that local governments continue to be agencies implementing the welfare and development schemes of the central and State government. Giving more power to local government means that we should be prepared for real decentralisation of power. Ultimately, democracy means that power should be shared by the people; people in the villages and urban localities must have the power to decide what policies and programmes they want to adopt. As you have studied earlier, democracy means decentralisation of power and giving more and more power to the people. The laws about local governments are an important step in the direction of democratisation. But the true test of democracy is not



merely in the legal provisions but in the practice of those provisions.

## Chapter 9 Constitution As A Living Document

In this chapter, you will see how the Constitution has worked in the last fifty-five years and how India has managed to be governed by the same Constitution. After studying this chapter you will find out that:

- the Indian Constitution can be amended according to the needs of the time;
- though many such amendments have already taken place, the Constitution has remained intact and its basic premises have not changed;
- the judiciary has played an important role in protecting the Constitution and also in interpreting the Constitution; and
- the Constitution is a document that keeps evolving and responding to changing situations.

### Are Constitutions Static?

Is it that our Constitution is so good that it needs no change? Was it that our Constitution makers were so farsighted and wise that they had foreseen all the changes that would take place in the future? It is also true that the Constitution makers were very farsighted and provided for many solutions for future situations. But no constitution can provide for all eventualities. No document can be such that it needs no change. The makers of the Indian Constitution placed the Constitution above ordinary law and expected that the future generations will respect this document. At the same time, they recognised that in the future, this document may require modifications. The Indian Constitution is a combination of two approaches –the Constitution is a sacred document and it is an instrument that may require changes from time to time.

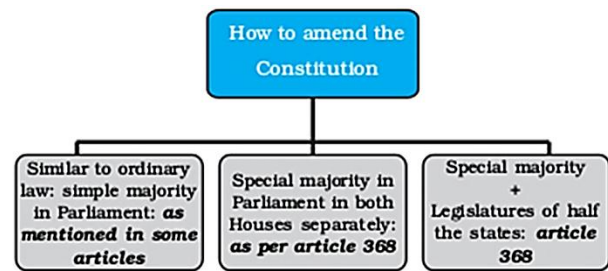
### How to Amend the Constitution?

**Article 368: ...Parliament may in exercise of its constituent power amend by way of addition, variation or repeal any provision of this Constitution in accordance with the procedure laid down in this article.**

We have already seen that the makers of our Constitution wanted to strike a balance. The Constitution must be amended if so required. But it must be protected from unnecessary and frequent changes. In other words, they wanted the Constitution to be 'flexible' and at the same time 'rigid'. Flexible means open to changes and rigid means resistant to changes. A constitution that can be very easily changed or modified is often called flexible. In the case of constitutions, which are very difficult to amend, they are described as rigid. The Indian Constitution combines both these characteristics.

The makers of the Constitution were aware of the fact that there may be some faults or mistakes in the Constitution; they knew that the Constitution could not be totally free of errors. Whenever such mistakes would come to light, they wanted the Constitution to be easily amended and to be able to get rid of these mistakes. Then there were some provisions in the Constitution that were of temporary nature and it was decided that these could be altered later on once the new Parliament was elected. But at the same time, the Constitution was framing a federal polity and therefore, the rights and powers of the States could not be changed without the consent of the States. Some other features were so

central to the spirit of the Constitution that the Constitution makers were anxious to protect these from change. These provisions had to be made rigid. These considerations led to different ways of amending the Constitution.



There are many articles in the Constitution, which mention that these articles can be amended by a simple law of the Parliament. No special procedure for amendment is required in such cases and there is no difference at all between an amendment and an ordinary law. These parts of the Constitution are very flexible. Read carefully the following text of some articles of the Constitution. In both these articles, the wording 'by law' indicates that these articles can be modified by the Parliament without recourse to the procedure laid down in Article 368. Many other articles of the Constitution can be modified by the Parliament in this simple manner.

**Article 2: Parliament may by law admit into the union .....new states....**

**Article 3: Parliament may by law... b) increase the area of any state....**

For amending the remaining parts of the Constitution, provision has been made in Article 368 of the Constitution. In this article, there are two methods of amending the Constitution and they apply to two different sets of articles of the Constitution. One method is that amendment can be made by special majority of the two houses of the Parliament. The other method is more difficult: it requires special majority of the Parliament and consent of half of the State legislatures. Note that all amendments to the Constitution are initiated only in the Parliament. Besides the special majority in the Parliament no outside agency —like a constitution commission or a separate body—is required for amending the Constitution. Similarly, after the passage in the Parliament and in some cases, in State legislatures, no referendum is required for ratification of the amendment. An amendment bill, like all other bills, goes to the President for his assent, but in this case, the President has no powers to send it back for reconsideration. These details show how rigid and complicated the amending process could have been. Our Constitution avoids these complications. This makes the amendment procedure relatively simple. But more importantly, this process underlines an important principle: only elected representatives of the people are empowered to consider and take final decisions on the question of amendments. Thus, sovereignty of elected representatives (parliamentary sovereignty) is the basis of the amendment procedure.

### Special Majority

In the chapters on Election, Executive and Judiciary, we have come across provisions that require 'special majority'. Let us repeat again what special majority means. Ordinarily, all business of the legislature requires that a motion or resolution or bill should get the support of a simple majority of the members voting at that time.

Suppose that at the time of voting on a bill, 247 members were present in the house and all of them participated in the voting on the bill. Then, the bill would be passed if at least 124 members voted in favour of the bill. Not so in the case of an amendment bill. Amendment to the Constitution requires two different kinds of special majorities: in the first place, those voting in favour of the amendment bill should constitute at least half of the total strength of that House. Secondly, the supporters of the amendment bill must also constitute two-thirds of those who actually take part in voting. Both Houses of the Parliament must pass the amendment bill separately in this same manner (there is no provision for a joint session). For every amendment bill, this special majority is required.

Can you see the significance of this requirement? In the Lok Sabha there are 545 members. Therefore, any amendment must be supported by a minimum of 273 members. Even if only 300 members are present at the time of voting, the amendment bill must get the support of 273 out of them. But imagine that 400 members of Lok Sabha have voted on an amendment bill. How many members should support the bill to get the bill passed?

In addition to this, both the Houses must pass the amendment bill (with special majorities) separately. This means that unless there is sufficient consensus over the proposed amendment, it cannot be passed. If the party in power enjoys very thin majority, it can pass legislation of its choice and can get budget approved even if the opposition does not agree. But it would need to take at least some opposition parties into confidence, if it wanted to amend the Constitution. So, the basic principle behind the amending procedure is that it should be based on broad support among the political parties and parliamentarians.

Two principles dominate the various procedures of amending the constitutions in most modern constitutions.

- One is the principle of special majority. For instance, the constitutions of U.S., South Africa, Russia, etc. have employed this principle: In the case of constitution of US, it is two-thirds majority, while in South Africa and Russia, for some amendments, three-fourths majority is required.

- The other principle that is popular among many modern constitutions is that of people's participation in the process of amending the constitution. In Switzerland, people can even initiate an amendment. Other examples of countries where people initiate or approve amendment to the constitution are Russia and Italy, among others.

"Those who are dissatisfied with the constitution need only two-third majority. If they are not able to obtain even that their dissatisfaction with the constitution cannot be deemed to be shared by the general public." Note that Dr. Ambedkar is talking here not only of parliamentary majority. He refers to 'sharing (of the views) by the general public'. This indicates that behind the majority there is the principle of public opinion that governs decision-making.

### **Ratification by States**

For some articles of the Constitution, special majority is not sufficient. When an amendment aims to modify an article related to distribution of powers between the States and the central government, or articles related to representation, it is necessary that the States must be consulted and that they give their consent. We have studied the federal nature of the Constitution.

Federalism means that powers of the States must not be at the mercy of the central government. The Constitution has ensured this by providing that legislatures of half the States have to pass the amendment bill before the amendment comes into effect. Apart from the provisions related to federal structure, provisions about fundamental rights are also protected in this way. We can say that for some parts of the Constitution, greater or wider consensus in the polity is expected. This provision also respects the States and gives them participation in the process of amendment. At the same time, care is taken to keep this procedure somewhat flexible even in its more rigid format: consent of only half the States is required and simple majority of the State legislature is sufficient. Thus, the amendment process is not impracticable even after taking into consideration this more stringent condition.

We may summarise that the Constitution of India can be amended through large-scale consensus and limited participation of the States. The founding fathers took care that Constitution would not be open to easy tampering. And yet, future generations were given the right to amend and modify according to the needs and requirements of the time.

### **Why Have There Been so Many Amendments?**

There is always a criticism about the number of amendments. It is said that there have been far too many amendments to the Constitution of India. On the face of it, the fact that ninety-three amendments took place in fifty-five years does seem to be somewhat odd. But the two graphs above suggest that amendments are not only due to political considerations. Barring the first decade after the commencement of the Constitution, every decade has witnessed a steady stream of amendments. This means that irrespective of the nature of politics and the party in power, amendments were required to be made from time to time. Was this because of the inadequacies of the original Constitution? Is the Constitution too flexible?

### **Contents of amendments made so far**

Amendments made so far may be classified in three groups. In the first group there are amendments, which are of a technical or administrative nature and were only clarifications, explanations, and minor modifications etc. of the original provisions. They are amendments only in the legal sense, but in matter of fact, they made no substantial difference to the provisions.

This is true of the amendment that increased the age of retirement of High Court judges from 60 to 62 years (15th amendment). Similarly, salaries of judges of High Courts and the Supreme Court were increased by an amendment (55th amendment).

We may also take the example of the provision regarding reserved seats in the legislatures for scheduled castes and scheduled tribes. The original provision said that these reservations were for a period of ten years. However, in order to ensure fair representation of these sections, it was necessary to extend this period by ten years. Thus, after every ten years an amendment is made to extend the period by another ten years. This has led to five amendments so far. But these amendments have not made any difference to the original provision. In this sense, it is only a technical amendment.

Do you remember the discussion in chapter four about the role of the President? In the original Constitution, it was assumed that in our parliamentary government, the

President would normally abide by the advice of the Council of Ministers. This was only reiterated by a later amendment when Article 74 (1) was amended to clarify that the advice of the Council of Ministers will be binding on the President (President shall act in accordance with the advice of the Council of Ministers). In reality, this amendment did not make any difference because, that is exactly what has been happening all through. The amendment was only by way of explanation.

### **Differing interpretations**

A number of amendments are a product of different interpretations of the Constitution given by the judiciary and the government of the day. When these clashed, the Parliament had to insert an amendment underlining one particular interpretation as the authentic one. It is part of the democratic politics that various institutions would interpret the Constitution and particularly the scope of their own powers in a different manner. Many times, the Parliament did not agree with the judicial interpretation and therefore, sought to amend the Constitution to overcome the ruling of the judiciary. In the period between 1970 and 1975 this situation arose frequently. In the chapter on the Judiciary, you have already studied the issues of difference between the Judiciary and the Parliament: one was the relationship between fundamental rights and directive principles, the other was the scope of right to private property and the third was the scope of Parliament's power to amend the Constitution. In the period 1970-1975, the Parliament repeatedly made amendments to overcome the adverse interpretations by the judiciary.

It may be kept in mind that during this period (1970-75) many political events were unfolding and thus this history of our constitutional development can be fully understood only in the context of the politics of that period. You will know more about these issues in the next year when you study the political history of independent India.

### **Amendments through political consensus**

Thirdly, there is another large group of amendments that have been made as a result of the consensus among the political parties. We may say that this consensus made it necessary that some changes had to be made in order to reflect the prevailing political philosophy and aspirations of the society. In fact, many of the amendments of the post-1984 period are instances of this trend. Remember our question above about the peculiarity that even when there were coalition governments, this period saw so many amendments? The reason is because many of these amendments were based on an evolving consensus on certain issues. Starting with the anti-defection amendment (52nd amendment), this period saw a series of amendments in spite of the political turbulence.

Apart from the anti-defection amendments (52nd and 91st) these amendments include the amendment bringing down the minimum age for voting from 21 to 18 years, the 73rd and the 74th amendments, etc. In this same period, there were some amendments clarifying and expanding the scope of reservations in jobs and admissions. After 1992-93, an overall consensus emerged in the country about these measures and therefore, amendments regarding these measures were passed without much difficulty (77th, 81st, and 82nd amendments).

### **Controversial Amendments**

Our discussion so far, should not create an impression

that there has never been any controversy over amending the Constitution. In fact, amendments during the period 1970 to 1980 generated a lot of legal and political controversy. The parties that were in opposition during the period 1971-1976, saw many of these amendments as attempts by the ruling party to subvert the Constitution. In particular, the 38th, 39th and 42nd amendments have been the most controversial amendments so far. These three amendments were made in the background of internal emergency declared in the country from June 1975. They sought to make basic changes in many crucial parts of the Constitution.

The 42nd amendment was particularly seen as a wide-ranging amendment affecting large parts of the Constitution. It was also an attempt to override the ruling of the Supreme Court given in the Kesavananda case. Even the duration of the Lok Sabha was extended from five to six years. In the chapter on Rights, you have read about fundamental duties. They were included in the Constitution by this amendment act. The 42nd amendment also put restrictions on the review powers of the Judiciary. It was said at that time that this amendment was practically a rewriting of many parts of the original Constitution. Do you know that this amendment made changes to the Preamble, to the seventh schedule of the Constitution and to 53 articles of the Constitution? Many MPs belonging to the opposition parties were in jail when this amendment was passed in the Parliament. In this backdrop, elections were held in 1977 and the ruling party (Congress) was defeated. The new government thought it necessary to reconsider these controversial amendments and through the 43rd and 44th amendments, cancelled most of the changes that were effected by the 38th, 39th and the 42nd amendments. The constitutional balance was restored by these amendments.

### **Basic structure and evolution of the constitution**

One thing that has had a long lasting effect on the evolution of the Indian Constitution is the theory of the basic structure of the Constitution. You know already that the Judiciary advanced this theory in the famous case of Kesavananda Bharati. This ruling has contributed to the evolution of the Constitution in the following ways:

- It has set specific limits to the Parliament's power to amend the Constitution. It says that no amendment can violate the basic structure of the Constitution;
- It allows the Parliament to amend any and all parts of the Constitution (within this limitation); and
- It places the Judiciary as the final authority in deciding if an amendment violates basic structure and what constitutes the basic structure.

The Supreme Court gave the Kesavananda ruling in 1973. In the past three decades, this decision has governed all interpretations of the Constitution and all institutions in the country have accepted the theory of basic structure. In fact, the theory of basic structure is itself an example of a living constitution. There is no mention of this theory in the Constitution. It has emerged from judicial interpretation. Thus, the Judiciary and its interpretation have practically amended the Constitution without a formal amendment. All living documents evolve in this manner through debates, arguments, competition and practical politics. Since 1973, the Court has, in many cases, elaborated upon this theory of basic structure and given instances



of what constitutes the basic structure of the Constitution of India. In a sense, the basic structure doctrine has further consolidated the balance between rigidity and flexibility: by saying that certain parts cannot be amended, it has underlined the rigid nature while by allowing amendments to all others it has underlined the flexible nature of the amending process. There are many other examples of how judicial interpretation changed our understanding of the Constitution. In many decisions the Supreme Court had held that reservations in jobs and educational institutions cannot exceed fifty per cent of the total seats. This has now become an accepted principle. Similarly, in the case involving reservations for other backward classes, the Supreme Court introduced the idea of creamy layer and ruled that persons belonging to this category were not entitled to benefits under reservations. In the same manner, the Judiciary has contributed to an informal amendment by interpreting various provisions concerning right to education, right to life and liberty and the right to form and manage minority educational institutions. These are instances of how rulings by the Court contribute to the evolution of the Constitution.

### Review of the Constitution

*In the late nineties, efforts were made to review the entire Constitution. In the year 2000 a commission to review the working of the Constitution was appointed by the Government of India under the chairmanship of a retired Chief Justice of the Supreme Court, Justice Venkatachaliah. Opposition parties and many other organisations boycotted the commission. While a lot of political controversy surrounded this commission, the commission stuck to the theory of basic structure and did not suggest any measures that would endanger the basic structure of the Constitution. This shows the significance of the basic structure doctrine in our constitutional practice.*

### Constitution as a living document

We have described our Constitution as a living document. What does that mean?

Almost like a living being, this document keeps responding to the situations and circumstances arising from time to time. Like a living being, the Constitution responds to experience. In fact that is the answer to the riddle we mentioned at the beginning about the durability of the Constitution. Even after so many changes in the society, the Constitution continues to work effectively because of this ability to be dynamic, to be open to interpretations and the ability to respond to the changing situation. This is a hallmark of a democratic constitution. In a democracy, practices and ideas keep evolving over time and the society engages in experiments according to these. A constitution, which protects democracy and yet allows for evolution of new practices becomes not only durable but also the object of respect from the citizens. The important point is: has the Constitution been able to protect itself and protect democracy?

In the last fifty five years some very critical situations arose in the politics and constitutional development of the country. We have made a brief reference to some of these in this chapter already. In terms of constitutional-legal issues, the most serious question that came up again and again from 1950 was about the supremacy of the Parliament. In a parliamentary democracy, the Parliament represents the people and therefore, it is expected to have an upper hand over both Executive

and Judiciary. At the same time, there is the text of the Constitution and it has given powers to other organs of the government. Therefore, the supremacy of the Parliament has to operate within this framework. Democracy is not only about votes and people's representation. It is also about the principle of rule of law. Democracy is also about developing institutions and working through these institutions. All the political institutions must be responsible to the people and maintain a balance with each other.

### Contribution of the judiciary

During the controversy between the Judiciary and the Parliament, the Parliament thought that it had the power and responsibility to make laws (and amendments) for furthering the interests of the poor, backward and the needy. The Judiciary insisted that all this has to take place within the framework provided by the Constitution and pro-people measures should not bypass legal procedures, because, once you bypass laws even with good intentions, that can give an excuse to the power holders to use their power arbitrarily. And democracy is as much about checks on arbitrary use of power as it is about the well-being of the people. The success of the working of the Indian Constitution lies in resolving these tensions. The Judiciary, in its famous Kesavananda ruling found a way out of the existing complications by turning to the spirit of the Constitution rather than its letter. If you read the Constitution, you will not find any mention of the 'basic structure' of the Constitution. Nowhere does the Constitution say that such and such are part of the basic structure. In this sense, the 'basic structure' theory is the invention of the Judiciary. How did it invent such a non-existent thing? And how is it that all other institutions have accepted this during the past three decades? Therein lies the distinction between letter and spirit. The Court came to the conclusion that in reading a text or document, we must respect the intent behind that document. A mere text of the law is less important than the social circumstances and aspirations that have produced that law or document. The Court was looking at the basic structure as something without which the Constitution cannot be imagined at all. This is an instance of trying to balance the letter and the spirit of the Constitution.

### Maturity of the political leadership

Our discussion of the role of Judiciary, in the paragraph above, brings out one more fact. In the background of the fierce controversy that raged between 1967 and 1973, the Parliament and the Executive also realised that a balanced and long term view was necessary. After the Supreme Court gave the ruling in the Kesavananda case some attempts were made to ask the Court to reconsider its ruling. When these failed, the 42nd amendment was made and parliamentary supremacy was asserted. But the Court again repeated its earlier stand in the Minerva Mills case (1980). Therefore, even three decades after the ruling in the Kesavananda case, this ruling has dominated our interpretation of the Constitution. Political parties, political leaders, the government, and the Parliament, accepted the idea of inviolable basic structure. Even when there was talk about 'review' of the Constitution, that exercise could not cross the limits set by the theory of the basic structure.

### Conclusion

There can still be debates about what constitutes basic structure. There is nothing wrong in such debates. We

must remember that politics in a democracy is necessarily full of debates and differences. That is a sign of diversity, liveliness and openness. Democracy welcomes debates. At the same time, our political parties and leadership have shown maturity in setting limits to these debates. Because, politics is also about compromises and give-and-take. Extreme positions may be theoretically very correct and ideologically very attractive, but politics demands that everyone is prepared to moderate their extreme views, sharp positions and reach a common minimum ground. Only then democratic politics becomes possible. Politicians

and the people of India have understood and practised these skills. That has made the experience of working of the democratic Constitution quite successful. Among the different organs of the government, there will always be competition over which one is more important than the others. They will also always fight over what constitutes the welfare of the people. But in the last instance, the final authority lies with the people. People, their freedoms and their well-being constitute the purpose of democracy and also the outcome of democratic politics.

# NCERT Class 12

## Contemporary World Politics

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 The Cold War Era

##### Topic-1 Cuban Missile Crisis

- In April 1961, the leaders of the Union of Soviet Socialist Republics (USSR) were apprehensive of an American attack on Cuba.
- Cuba was a communist ruled country. Fidel Castro was the President of Cuba at that time. Cuba is a small island nation off the coast of the United States. Cuba was an ally of the Soviet Union and received both diplomatic and financial aid from it.
- Nikita Khrushchev was the leader of the Soviet Union. In order to convert Cuba into a Russian base, Nikita Khrushchev placed nuclear missiles in Cuba in the year 1962. In order to get Khrushchev remove these missiles and nuclear weapons, the American President, John F. Kennedy ordered American warships to intercept any Soviet ships heading to Cuba.
- This move of Kennedy was a way of warning the USSR of his seriousness. This situation is known as the Cuban Missile Crisis. The Cuban Missile Crisis was a high point of what came to be known as the Cold War.
- The Cold War is referred to the competition, the tensions and a series of confrontations between the United States and the Soviet Union, backed by their respective allies.
- The Cold War was accompanied by a real ideological conflict as well as difference over the best and the most appropriate way of organising political, economic and social life all over the world.
- The Western Alliance, headed by the US, represented the ideology of liberal democracy and capitalism. The Eastern Alliance, headed by the Soviet Union, was committed to the ideology of socialism and communism.

##### Topic-2 Cold War and the Emergence of Two Power Blocs

- The Second World War came to an end in the year 1945. The Allied Forces led by the US, Soviet Union, Britain and France defeated the Axis Powers led by Germany, Italy and Japan. The War had involved almost all the major powers of the world and spread out to regions outside Europe including South-east Asia, China, Myanmar (Burma) and parts of India's North-east.
- The end of the Second World War was also the beginning of the Cold War. The Second World War came to an end when the United States of America dropped two atomic bombs on the Japanese cities of Hiroshima and Nagasaki in August, 1945.
- The consequence of the end of the Second World War was the rise of two new powers on the global stage—these were the United States of America and the Soviet Union. The two superpowers and the countries in the rival blocs led by the superpowers were expected to behave in a rational and responsible manner in the sense

that they understood the risks in fighting wars that might involve the two superpowers.

- In a world sharply divided between two alliance systems, a state was supposed to remain tied to its protective superpower to the limit the influence of the other superpower and its allies.
- The smaller states in the alliances used the link to the superpowers for their own purposes. The alliance systems led by the two superpowers divided the world almost into two camps. The western alliance was formalised into an organisation called NATO. NATO came into existence in the year 1949.
- The eastern alliance, known as the Warsaw Pact, was led by the Soviet Union. Warsaw Pact was created in the year 1955. In some cases, the superpowers used their military power to bring countries into their respective alliances.
- In east and south-east and west Asia, the United States built an alliance system called the Southeast Asian Treaty Organisation (SEATO). The newly independent countries feared of losing their freedom to either of the superpowers in this era. Cracks and splits appeared within the alliances. The emergence of Non-Aligned Movement gave the newly independent countries, a way of staying out of the alliance.

##### Topic-3 Arenas of the Cold War

The Cold War also led to several shooting wars. The two superpowers were poised for direct confrontation in Korea, Berlin, the Congo and in several other places.

- The arenas of the Cold War refer to the areas where crisis and war occurred or threatened to occur between the alliance systems but did not cross certain limits.
- Sometimes countries outside the two blocs, like NAM countries, played a significant role in reducing Cold War conflicts and averting some grave crisis. Jawaharlal Nehru—one of the key leaders of the NAM—played a crucial role in mediating between the two Koreas.
- Mutual suspicions led the two superpowers to arm themselves to the teeth and to constantly prepare for the war. The circumstances forced the two superpowers to collaborate in limiting or eliminating certain kinds of nuclear and non-nuclear weapons.
- The two sides signed three significant agreements within a decade—these were (a) The Limited Test Ban Treaty, (b) Nuclear Non-Proliferation Treaty, and (c) The Anti-Ballistic Missile Treaty.

##### Topic-4 Challenge to Bipolarity and New International Economic Order

The Non-Aligned Movement offered the newly decolonised countries of Asia, Africa and Latin America a third option not to join either alliance. The NAM emerged out of a meeting of Yugoslavia's leader Josip Broz Tito, India's leader Jawaharlal Nehru and Egypt's leader Gamal Abdel Nasser in 1956.

- The first non-aligned summit was held in the year 1961 in Belgrade. The first summit of the NAM was attended by 25 members. As NAM grew into popular international



movement, countries of various different political systems and interests joined it.

- The non-aligned countries played an active role in mediating between the two rival alliances for the cause of peace and stability. Majority of the members of the non-aligned countries were Least Developed Countries (LDCs). These least developed countries were required to be more developed economically and to lift their people out of poverty.
- The idea of New International Economic Order (NIEO) originated with this realisation that the newly independent countries will be economically developed.
- The United Nations Conference on Trade and Development (UNCTAD) brought out a report in 1972 entitled Towards a New Trade Policy for Development. Gradually NAM became an economic pressure group.

### Topic-5 India and the Cold War

As a leader of NAM, India's response to the ongoing Cold War was two-fold: At one level, it took particular care in staying away from the two alliances. Second, it raised its voice against the newly decolonised countries becoming part of these alliances. India's policy was neither negative nor passive. As Nehru reminded the world, non-alignment was not a policy of 'fleeing away'. On the contrary, India was in favour of actively intervening in world affairs to soften Cold War rivalries. India tried to reduce the differences between the alliances and thereby prevent differences from escalating into a full-scale war. Indian diplomats and leaders were often used to communicate and mediate between Cold War rivals such as in the Korea War in the early 1950s.

It is important to remember that India chose to involve other members of the non-aligned group in this mission. During the Cold War, India repeatedly tried to activate those regional and international organisations, which were not a part of the alliances led by the US and USSR. Nehru reposed great faith in 'a genuine commonwealth of free and cooperating nations' that would play a positive role in softening, if not ending, the Cold War.

**Non-alignment was not, as some suggest, a noble international cause which had little to do with India's real interests. A non-aligned posture also served India's interests very directly, in at least two ways:**

(i) First, non-alignment allowed India to take international decisions and stances that served its interests rather than the interests of the super-powers and their allies.

(ii) Second, India was often able to balance one superpower against the other. If India felt ignored or unduly pressurised by one superpower, it could tilt towards the other. Neither alliance system could take India for granted or bully it.

India's policy of non-alignment was criticised on a number of counts. Here we may refer to only two criticisms:

(i) First, India's non-alignment was said to be 'unprincipled'. In the name of pursuing its national interest, India, it was said, often refused to take a firm stand on crucial international issues.

(ii) Second, it is suggested that India was inconsistent and took contradictory postures. Having criticised others for joining alliances, India signed the Treaty of Friendship in August 1971 with the USSR for 20 years. This was regarded, particularly by outside observers, as virtually joining the Soviet alliance system. The Indian

government's view was that India needed diplomatic and possibly military support during the Bangladesh crisis and that in any case the treaty did not stop India from having good relations with other countries including the US.

Non-alignment as a strategy evolved in the Cold War context. As we will see in Chapter 2, with the disintegration of the USSR and the end of the Cold War in 1991, non-alignment, both as an international movement and as the core of India's foreign policy, lost some of its earlier relevance and effectiveness. However, non-alignment contained some core values and enduring ideas. It was based on a recognition that decolonised states share a historical affiliation and can become a powerful force if they come together. It meant that the poor and often very small countries of the world need not become followers of any of the big powers, that they could pursue an independent foreign policy. It was also based on a resolve to democratise the international system by thinking about an alternative world order to redress existing inequities. These core ideas remain relevant even after the Cold War has ended.

### ARMS CONTROL TREATIES

#### LIMITED TEST BAN TREATY (LTBT)

Banned nuclear weapon tests in the atmosphere, in outer space and under water.

Signed by the US, UK and USSR in Moscow on 5 August 1963. Entered into force on 10 October 1963.

#### NUCLEAR NON-PROLIFERATION TREATY (NPT)

Allows only the nuclear weapon states to have nuclear weapons and stops others from acquiring them. For the purposes of the NPT, a nuclear weapon state is one which has manufactured and exploded a nuclear weapon or other nuclear explosive device prior to 1 January 1967. So there are five nuclear weapon states: US, USSR (later Russia), Britain, France and China. Signed in Washington, London, and Moscow on 1 July 1968. Entered into force on 5 March 1970. Extended indefinitely in 1995.

#### STRATEGIC ARMS LIMITATION TALKS I (SALT-I)

The first round of the Strategic Arms Limitation Talks began in November 1969. The Soviet leader Leonid Brezhnev and the US President Richard Nixon signed the following in Moscow on 26 May 1972 – a) Treaty on the limitation of Anti-Ballistic Missile Systems (ABM Treaty); and b) Interim Agreement on the limitation of strategic offensive arms. Entered into force on 3 October 1972.

#### STRATEGIC ARMS LIMITATION TALKS II (SALT-II)

The second round started in November 1972. The US President Jimmy Carter and the Soviet leader Leonid Brezhnev signed the Treaty on the limitation of strategic offensive arms in Vienna on 18 June 1979.

#### STRATEGIC ARMS REDUCTION TREATY I (START-I)

Treaty signed by the USSR President Mikhail Gorbachev and the US President George Bush (Senior) on the reduction and limitation of strategic offensive arms in Moscow on 31 July 1991.

#### STRATEGIC ARMS REDUCTION TREATY II (START-II)

Treaty signed by the Russian President Boris Yeltsin and the US President George Bush (Senior) on the reduction and limitation of strategic offensive arms in Moscow on 3 January 1993.

**Important Terms Alliance System** – The system created by the two superpowers to expand their sphere of influence all over the world. **Allied Forces** – One of the two camps formed during World War II including the US, Soviet Union, France and Britain. **Axis Power** – The other camp formed during World War II including Italy, Germany and Japan.

**Cuban Missile Crisis** – The tensions created between the US and the USSR when USSR installed missiles in Cuba to make it as a Russian base near US. **Decolonisation** – The process of making colonised states free and independent from the rule of the mother country. **Deterrence** – The logic followed by both the superpowers to avoid large scale destruction that will be caused by the use of nuclear weapons.

**Know the Personalities** **Josip Broz Tito** – He was the first President of Yugoslavia from 1945 to 1980. He fought against Germany in the World War II. Although a communist, he maintained some distance from the Soviet Union. He forced unity in Yugoslavia. He was the founder member of NAM. **Jawaharlal Nehru** – He was the first Prime Minister of India. He served the office during 1947 to 1964. He was also one of the founding members of NAM. He made efforts for Asian unity, decolonisation, nuclear disarmament and advocated peaceful coexistence for securing world peace. **Gamal Abdel Nasser** – He ruled Egypt during the period of 1956-1970. He espoused the causes of Arab nationalism, socialism and anti-imperialism. He nationalised the Suez Canal which led to an international conflict in the year 1956. He was also a founding member of NAM. **Sukarno** – He was the first President of Indonesia. He served as the President of Indonesia during 1945 to 1960. He led the freedom struggle and espoused the causes of socialism and anti-imperialism. He organised the Bandung Conference. He was overthrown in a military coup. He extended a big assistance in the establishment of NAM. **Kwame Nkrumah** – He was the first Prime Minister of Ghana. He remained the Prime Minister of Ghana during 1952 to 1966. He led the freedom movement of his country and advocated the causes of socialism and African unity. He opposed neocolonialism. He was removed in a military coup. He also supported the idea of NAM.

**Important Dates** **1.** 1939 – 1945 World War II **2.** 1947 Harry Truman, President of USA presented Doctrine of Containment of Communism **3.** 1947-1952 Marshall Plan – USA aid for reconstruction of Western Europe **4.** 1948-49 Berlin blockade by USSR **5.** 1949 NATO was formed **6.** 1950-1953 Korean War **7.** 1954 Vietnam defeated France, Geneva Accords signed, Division of Vietnam **8.** 1954-1975 American intervention in Vietnam **9.** 1955 Baghdad Pact signed **10.** 1956 Soviet intervention in Hungary **11.** 1961 The Berlin Wall constructed **12.** 1985 Gorbachev became President of USSR and started reforms **13.** 1989 The Berlin Wall demolished **14.** 1990 Unification of Germany **15.** 1991 Disintegration of the Soviet Union, End of the Cold War

## Chapter 2 The End Of Bipolarity

### Topic-1 The Soviet System

- The Soviet Union came into existence in 1917, after the socialist revolution in Russia. The socialist revolution of Russia was inspired by the ideals of socialism, as opposed to capitalism and need for an egalitarian society. The revolution was aimed at removing the institution of private property. It was also aimed at designing a society based on principles of equality. The Soviet System centered on the Communist Party and no other political party was allowed.
- The economy was planned and controlled by the state. The political and economic systems of the Eastern European countries which had been liberated by the Soviet Union from the fascist forces after the Second

World War came under the control of the USSR and modelled after the USSR.

- The group of the countries which followed the USSR was called the Second World or the 'Socialist bloc'. The USSR was the head of the socialist bloc and the group was held together by a military alliance called Warsaw Pact.
- The Soviet Union became a great power after the Second World War. The Soviet Union had vast energy resources including oil, iron and steel, machinery production and a transport sector that connected its remotest areas with efficiency.
- The Soviet Union ensured a minimum standard of living for all citizens and the government subsidised basic necessities including health, education, child care and other welfare schemes.
- The Soviet System became very bureaucratic and authoritarian making life very difficult for its citizens as there was no freedom of speech. Although, on paper, Russia was the only one of the fifteen republics that together constituted the USSR. In reality, Russia dominated everything and people from other regions felt neglected and often suppressed.
- The Soviet Union lagged behind the West in technology, infrastructure and most importantly, in fulfilling the political or economic aspirations of citizens.
- The Soviet invasion on Afghanistan in 1979, weakened the system even further. The Soviet economy was faltering in the late 1970s and became stagnant.

### Topic-2 Gorbachev and Disintegration of Soviet Union: Causes and Consequences

Mikhail Gorbachev became the General Secretary of the Communist Party of the Soviet Union in 1985. At that time, reforms were needed to keep the USSR abreast of the information and technology of the world.

- Gorbachev's decision to normalise relation with the West and democratise and reform the Soviet Union brought some unexpected results. Gorbachev's policies of economic and political reform and democratisation were opposed by the leaders within the Communist Party.
- A coup was organised in 1991, that encouraged Communist hardliners. People did not want the old style of ruling and Boris Yeltsin emerged as a national hero in opposing the coup. In December 1991, under the leadership of Yeltsin, Russia, Ukraine and Belarus, three major republics of the USSR, declared that the Soviet Union was disbanded.
- Capitalism and democracy were adopted as the basis for the post-Soviet republics. Russia was accepted as the successor state of the Soviet Union.
- Internal weakness of Soviet political and economic advancement was responsible for the collapse of the Soviet System. The Soviet System was under huge economic burden as it used much of its resources in maintaining a nuclear and military arsenal and development of its satellite states in Eastern Europe.
- The common man became more knowledgeable about the economic advance of the West. The Soviet Union had become stagnant in an administrative and political sense as well. The rise of nationalism and the desire for sovereignty within various republics proved to be the final and most immediate cause of the disintegration of the USSR.
- The disintegration of the Soviet Union brought an end to the Cold War confrontations. Power relations in world politics changed and therefore, the relative influence of ideas and institutions also changed.

- The US became the sole superpower. Politically, the notion of liberal democracy emerged as the best way to organise political life. The end of the Soviet bloc meant the emergence of many new countries.

### Topic-3 Shock Therapy and its Consequences

The collapse of Communism led to the process of transition from an authoritarian socialist system to a democratic capitalist system in many countries. The model of transition, influenced by the World Bank and the IMF, came to be known as 'Shock Therapy'.

- The adoption of Shock Therapy required total shift to capitalist economy which led to the complete rooting of any structure evolved during the Soviet period. Shock therapy also involved drastic change in the external orientation of economies. The shock therapy ruined the economies and brought disaster upon the people.
- In Russia, the large state-controlled industrial complex collapsed, as about 90% of its industries were put up for sale to private individuals and companies. The shock therapy led to the virtual disappearance of entire industries and this was called the 'the largest garage sale in history'.
- Ruble, the Russian currency, declined and the high rate of inflation forced people to lose their savings. The withdrawal of government subsidies pushed large sections of the people into poverty. Privatisation led to new disparities.

### Topic-4 Tensions and Conflicts

- Most of the former Soviet Republics are prone to conflicts and many have had civil wars and insurgencies.
- In Russia, two republics, Chechnya and Dagestan, have had violent secessionist movements.
- In Central Asia, Tajikistan witnessed a civil war that went on for ten years till 2001.
- In Georgia, the demand for independence has come from two provinces resulting in a civil war.
- The Central Asian Republics are areas with vast hydrocarbon resources which have brought them economic benefit.
- In Eastern Europe, Czechoslovakia split peacefully into two, with Czechs and the Slovaks forming independent countries.
- After 1991, Yugoslavia broke apart with several provinces like Croatia, Slovenia and Bosnia and Herzegovina declaring independence.
- The NATO intervention and the bombing of Yugoslavia followed the inter-ethnic civil war.

### Topic-5 India's Relations with Post-Communist Countries

- India has maintained good relations with all the post-communist countries.
- India's relations with Russia are an important aspect of India's foreign policy.
- Russia and India share a vision of a multipolar world order.
- India stands to benefit from its relations with Russia on issues like Kashmir, energy supplies, sharing information on international terrorism, access to Central Asia and balancing its relations with China.
- Russia stands to benefit from this relationship because India is the second largest arms market for Russia.
- Russia and India have collaborated on various scientific projects.

**Important Terms** **Capitalist economy** – An economic setup in which land and productive assets are owned and controlled by the capitalists. **Collective security** – A system in which an attack on any country is regarded as a threat to all countries

and requires a collective response. **Egalitarian society** – A social setup in which all people are equally important and should have the same rights and opportunities in life. **Largest Garage Sale** – A result of Shock Therapy due to which the valuable industries of USSR were undervalued and sold at throwaway prices. **Multipolar system** – A system in which the affairs at the international level cannot be dominated by only one superpower but by a group of countries. **Shock Therapy** – A model in which Russia, Central Asia and East Europe transitioned from authoritarian socialist system to democratic capitalist system. **Socialist bloc** – The bloc formed by the countries liberated from fascist forces and mainly comprised of the East European countries. **Soviet System** – A system introduced after the Russian Revolution, 1917 based on the principles of egalitarian society and planned economy controlled by the State. **Unipolar system** – A system in which the affairs at international level are dominated by only one superpower.

**Know the Personalities** **Vladimir Lenin** – He was the founder of the Bolshevik Communist Party and leader of the Russian Revolution, 1917. He was founder-head of the USSR. He was an outstanding theoretician and practitioner of Marxism and a source of inspiration for communism all over the world. **Joseph Stalin** – He was the successor of Lenin and led the Soviet Union during its consolidation (1924-53). He was credited with Soviet victory in the Second World War and was held responsible for the Great Terror of the 1930s. **Nikita Khrushchev** – He was the leader of the Soviet Union who denounced Stalin's leadership style and introduced some reforms in 1956. He suggested 'peaceful co-existence' with the West. He was involved in suppressing popular rebellion in Hungary and in the Cuban Missile Crisis. **Leonid Brezhnev** – He proposed Asian Collective Security System, associated with the defence phase in relations with the US. He was involved in suppressing a popular rebellion in Czechoslovakia and in invading Afghanistan. **Mikhail Gorbachev** – He was the last leader of the Soviet Union. He introduced economic and political reform policies of Perestroika and Glasnost. He stopped the arms race with the US and ended the Cold War. He was blamed for disintegration of the Soviet Union. **Boris Yeltsin** – He was the first elected President of Russia. He rose to power in the Communist Party, was made the Mayor of Moscow by Gorbachev and later, he left the Communist Party. He played a key role in dissolving the Soviet Union. He is blamed for the hardships suffered by Russians in their transition from communism to capitalism.

**Important Dates** **1. March 1985** Mikhail Gorbachev elected as General Secretary of the Communist Party of the Soviet Union. Boris Yeltsin appointed as the Head of the Communist Party in Moscow. **2. 1988** Independence Movement started in Lithuania and later spread to Estonia and Latvia. **3. October 1989** Warsaw Pact terminated. **4. November 1989** Berlin Wall demolished. **5. March 1990** Lithuania became the first republic to declare independence from the Soviet Union. **6. June 1990** Russia declared independence from the Soviet Union. **7. June 1991** Boris Yeltsin declared as President of Russia. **8. September 1991** Baltic Republics of Estonia, Latvia and Lithuania became UN members. **9. December 25, 1991** Gorbachev resigned as the President of the Soviet Union. End of the Soviet Union.

## Chapter 3 Us Hegemony In World Politics

### Topic-1 New World Order and Clinton



## Years

- The era after the end of the Cold War, has been described as the period of US dominance or a unipolar world.
- To a great extent, the US hegemony began in 1991 after Soviet power disappeared from the international scene.
- Some other factors are also responsible for US hegemony.
- Some aspects of US hegemony emerged after the end of the Second World War in 1945.
- US President George H.W. Bush hailed the emergence of a 'new world order' after the invasion of Iraq on Kuwait.
- A massive coalition force of 660,000 troops from 34 countries fought against Iraq and defeated it in what came to be known as the First Gulf War.
- The military operation against Iraq is known as 'Operation Desert Storm'.
- An American general, Norman Schwarzkopf, led the UN coalition against Iraq. The First Gulf War revealed the vast technological gap that had opened up between the US military capability and that of other states.
- The First Gulf War is also called 'computer war' as US used highly publicised 'smart bombs.'
- Widespread television coverage of this war made it a 'video game war.'
- Despite winning the First Gulf War, George H.W. Bush lost the US presidential elections of 1992 to William Jefferson (Bill) Clinton of the Democratic Party.
- During Clinton years, it often seemed that the US had withdrawn into its internal affairs and was not fully engaged in world politics.
- In foreign policy, the Clinton government tended to focus on 'soft issues' like democracy promotion, climate change and world trade rather than on hard politics of military power and security.

## Topic-2 Global War on Terror and Iraq Invasion

- On 11 September 2001, US faced a terror attack in which North and South Towers of the World Trade Centre in New York were razed to the ground.
- Attack was also made on Pentagon, the headquarters of the US defence department.
- As a part of its 'Global War on Terror', the US launched 'Operation Enduring Freedom' against all those suspected to be behind this attack, mainly Al-Qaeda and the Taliban regime in Afghanistan.
- Some suspected persons were brought to Guantanamo Bay, a US naval base in Cuba, where the prisoners did not enjoy the protection of international law or the law of their own country or that of the US. Even the UN representatives were not allowed to meet these prisoners.
- On 19<sup>th</sup> March 2003, the US launched its invasion of Iraq under the code name 'Operation Iraqi Freedom'.
- The ostensible purpose of the invasion was to prevent Iraq from developing weapons of mass destruction.
- It is now widely accepted that the US invasion of Iraq was, in some crucial respects, both a military and political failure.

## Topic-3 Hegemony, its Types and Constraints

For understanding world politics, it is necessary that we understand the distribution of power among the countries of the world.

- An international system with only one centre of power may be described as hegemony.

- The word hegemony implies the leadership or predominance of one state. The first meaning of hegemony relates to the relations, patterns and balances of military capability between states.
- There are three types of hegemony—Hegemony as hard power, Hegemony as structural power, and Hegemony as soft power.
- The bedrock of contemporary US power lies in the overwhelming superiority of its military power. American military dominance today is both absolute and relative. The military dominance of the US is not just based on higher military spending, but on a qualitative gap, a technological charm that no other power can at present conceivably span.
- The structural power of hegemony is related to world economy. For structural hegemony, the hegemon must possess both the ability and the desire to establish certain norms for order and must sustain the global structure.
- A classical example of the structural power of the US is the academic degree called the Masters in Business Administration (MBA).
- The idea that business is a profession that can be taught in a university is uniquely American. The first business school in the world, the Wharton School at the University of Pennsylvania, was established in 1881. The first MBA course was initiated around 1900. The first MBA course outside the US was established only in 1950.
- The third sense of hegemony is about the capacity to manufacture consent. The third sense of hegemony implies class ascendancy in the social, political and particularly ideological spheres. The notion, Hegemony as soft power, suggests that a dominant power deploys not only military power but also ideological resources to shape the behaviour of competing and lesser powers.
- The predominance of the US in the world today is based not only on its military power and economic prowess, but also on its cultural presence. The biggest constraints to American hegemony lies within the heart of hegemony itself.
- There are three constraints on American power—the first constraint is the institutional architecture of the American state itself, the second constraint on American power is also domestic in nature and stems from the open nature of American society, the third constraint on the US that is perhaps the most important and it is NATO that could possibly moderate the exercise of American military power today.

## Topic-4 India and US

During the Cold War years, India found itself on the opposite side of the divide from the US. During the process of liberalising its economy, India integrated with the world economy.

- The policy and India's impressive economic growth rates in recent years have made the country an attractive economic partner for a number of countries including the US.
- One group of Indian analysts who sees international politics largely in terms of military power are fearful of the growing closeness between India and the US. The other group of Indian analysts sees the growing convergence of interests between the US and India as a historic opportunity for India.
- A third group of analysts advocates that India should take the lead in establishing a coalition of countries from the developing world. In fact, India-US relations are perhaps too complex to be managed by a single strategy.

### Topic-5 Ways to Overcome Hegemony

No single power is anywhere near balancing the US militarily. Some people argue that it is strategically more prudent to take advantage of the opportunities that hegemony creates and this strategy is known as the 'bandwagon' strategy.

- Another strategy related to overcoming the hegemony is to hide and it implies staying as far aloof from the dominant power as possible. Some people believe that resistance to American hegemony may not come from other states which are powerless to confront the US today, but rather from non-state actors.

#### FLASHBACK: INDIA AND THE USSR

During the Cold War era, India and the USSR enjoyed a special relationship which led critics to say that India was part of the Soviet camp. It was a multi-dimensional relationship:

**Economic:** The Soviet Union assisted India's public sector companies at a time when such assistance was difficult to get. It gave aid and technical assistance for steel plants like Bhilai, Bokaro, Visakhapatnam, and machinery plants like Bharat Heavy Electricals Ltd., etc. The Soviet Union accepted Indian currency for trade when India was short of foreign exchange.

**Political:** The Soviet Union supported India's positions on the Kashmir issue in the UN. It also supported India during its major conflicts, especially during the war with Pakistan in 1971. India too supported Soviet foreign policy in some crucial but indirect ways.

**Military:** India received most of its military hardware from the Soviet Union at a time when few other countries were willing to part with military technologies. The Soviet Union entered into various agreements allowing India to jointly produce military equipment.

**Culture:** Hindi films and Indian culture were popular in the Soviet Union. A large number of Indian writers and artists visited the USSR.

**Important Terms 9/11** – Used to denote a series of attacks on the US, by hijackers from Arab countries on September 11, 2001. **America** – The term covers two continents of North America, and South America and US is only one of the countries of the American continent that symbolises US hegemony.

**Bandwagon Strategy** – The strategy to extract benefits by operating within hegemonies system in place of opposing it. **Bretton Woods System** – A basic economic structure of world set up by US after World War II. **Global Village** – It refers to US as the village headman and all the nations as its members are neighbours.

**Guantanamo Bay** – A naval base in Cuba set up by the US where prisoners are forbidden of the protection of international law or law of their own country or that of US. **Hegemony** – An international system to dominate world by only one superpower.

**New World Order** – The system that emerged in 1991 after the end of Cold War. **Qualitative Gap** – It signifies US hegemony in technology and no other power could dare to challenge US. **Sea Lanes of Communications (SLOCs)** – It is the naval power of hegemony that underwrites the law of the sea and ensures freedom of navigation in international waters.

**Soviet System** – The system introduced after Russian Revolution in 1917 based on the principles of egalitarian society and planned economy controlled by the State.

#### Know the Personalities George H.W. Bush –

He was the President of the USA at the time of the First Gulf War. He hailed the emergence of a 'New World Order'. **Bill Clinton** – Bill Clinton became the President of the USA in the year 1992 and continued for eight years till 2000. During Clinton years, it often seemed that the US had withdrawn into its internal affairs and was not fully engaged in world politics. In foreign policy, the Clinton government tended to focus on 'soft issues' like democracy promotion, climate change and world trade rather than on the hard politics of military power and security. **George W. Bush** – George W. Bush became the President of America in the year 2000. He was the son of the earlier President George H. W. Bush. The USA was attacked by the terrorist on 9/11 during his tenure. Bush had a much harder view of US interests and of the means by which to advance them.

**Important Dates 1. 1945-1991** Cold War era. **2.**

**August 1990** Kuwait invasion by Iraq. **3. 1991**

Establishment of US Hegemony. Beginning of New World Order. **4. 1998** Operation Infinite Reach started by US by sending cruise missiles with Al-Qaeda terrorists as the target. **5. September 2001** Series of attacks on US by hijackers from Middle East countries, popularly known as 9/11 attacks. **6. March 2003** Operation Iraqi Freedom launched by US to invade Iraq.

## Chapter 4 Alternative Centres Of Power

### Topic-1 European Union

The end of the Second World War left many European leaders grappled with the 'Question of Europe'.

- The Second World War shattered many of the assumptions and structures on which the European states had based their relations. European integration after 1945 was aided by the Cold War. America extended massive financial help for reviving Europe's economy under 'Marshall Plan'.

- Under the Marshall Plan, the Organisation for European Economic Cooperation (OEEC) was established in 1948 to channel aid to the west European states. OEEC, became a forum where the western European states began to co-operate on trade and economic issues.

- The Council of Europe, established in 1949, was another step forward in political co-operation. The process of economic integration of European capitalist countries led to the formation of the European Economic Community in 1957.

- The collapse of the Soviet bloc put Europe on a fast track and resulted in the establishment of the European Union in 1992.

- The foundation of the European Union was laid for a common foreign and security policy, co-operation on justice and home affairs, and the creation of a single currency. The European Union has tried to expand areas of co-operation while acquiring new members, especially from erstwhile Soviet bloc. The currency of the European Union is Euro.

- The economic power of the European Union gives it influence over its closest neighbours as well as in Asia and Africa. The European Union also functions as an important bloc in international economic organisations such as the World Trade Organisation (WTO).

- Two members of the European Union, Britain and France, hold the permanent seats on the UN Security Council. Militarily, the European Union's combined armed forces are the second largest in the world. In many areas, members of the European Union have their own foreign relations and defence policies that are often at odds with each other.

### Topic-2 Association of South East Asian Nations (ASEAN)

- The countries of south-eastern region of Asia suffered the economic and political consequences of repeated colonialisms, both European and Japanese before and during the Second World War.

- After the end of the Second World War, the south-eastern region of Asia confronted problems of nation-building, the ravages of poverty and economic backwardness and the pressure to align with one great power or another during the Cold War.

- Efforts at Asian and Third World unity, such as the Bandung Conference and the Non-Aligned Movement,

were ineffective in establishing the conventions for informal co-operation and interaction.

- ASEAN was established in 1967, by five countries of the south-eastern region – Indonesia, Malaysia, the Philippines, Singapore and Thailand.
- ASEAN came into existence by the signing of Bangkok Declaration.
- The objectives of ASEAN were primarily to accelerate economic growth and through that 'social progress' and 'cultural development'.
- A secondary objective of ASEAN was to promote regional peace and stability based on the rule of law and the principles of the United Nations Charter.
- ASEAN countries have celebrated what has become known as the 'ASEAN Way', a form of interaction that is informal, non-confrontationist and co-operative.
- With some of the fastest growing economies in the world, ASEAN broadened its objectives beyond the economic and social spheres.
- The ASEAN Regional Forum, which was established in 1994, is the organisation that carries out co-ordination of security and foreign policy.
- The objectives of the ASEAN Economic Community are to create a common market and production base within ASEAN states and to aid social and economic development in the region. ASEAN had focuses on creating a Free Trade Area (FTA) for investment, labour and services.
- ASEAN Vision 2020 has defined an outward-looking role for ASEAN in the international community.
- During the Cold War years, Indian foreign policy did not pay adequate attention to ASEAN, but in recent years, India has tried to make amends.
- ASEAN's strength lies in its policies of interaction and consultation with member states, with dialogue partners and with other non-regional organisations.

### Topic-3 The Chinese Economy

- China's economic success since 1978 has been linked to its rise as great power.
- It is projected that China will overtake USA as the world's largest economy by 2040.
- The strength of the economy of China together with other factors such as population, land mass, resources, regional location and political influence, add to its power in significant ways.
- After the inception of the People's Republic of China in 1949, following the communist revolution under the leadership of Mao, its economy was based on the Soviet model.
- As China was short of foreign exchange that it needed in order to buy technology and goods from the world market, China decided to substitute imports by domestic goods.
- This model allowed China to use its resources to establish the foundations of an industrial economy on a scale that did not exist before.
- The economy of China grew at a respectable rate of 5-6 per cent, but an annual growth of 2-3 per cent in population meant that economic growth was insufficient to meet the needs of a growing population.
- The Chinese leadership took major policy decisions in the 1970s.
- China ended its political and economic isolation with the establishment of relations with the United States in 1972.
- Premier Zhou Enlai, proposed the 'four modernisations' in the fields of agriculture, industry, science and technology and military in 1973.
- By 1978, the then leader Deng Xiaoping announced the

'open door' policy and economic reforms in China.

- The open door policy was to generate higher productivity by investments of capital and technology from abroad.
- The Chinese did not go for 'shock therapy' but opened their economy step by step.
- The privatisation of agriculture in 1982 was followed by the privatisation of industry in 1998.
- Trade barriers were eliminated only in Special Economic Zones (SEZs) where foreign investors could set up enterprises.
- The new economic policies helped the Chinese economy to break from stagnation.
- Privatisation of agriculture led to a remarkable rise in agricultural production and rural incomes.
- China's accession to the WTO in 2001 has been a further step in its opening to the outside world.
- While the Chinese economy has improved dramatically, not everyone in China has received the benefits of the reforms.
- Regionally and globally, China has become an economic power to reckon with.
- The integration of China's economy and the inter-dependencies that this has created has enabled China to have considerable influence with its trade partners.

### Topic-4 India's Relations with China

- India and China were the great powers in Asia before the advent of Western imperialism.
- China had considerable influence and control on the periphery of its borders based on its unique tributary system.
- Various kingdoms and empires in India also extended their influence beyond their borders.
- In both the cases, this influence was political and cultural interaction between the two.
- In the twentieth century, when both India and China confronted each other, they had some difficulty evolving a foreign policy to deal with each other.
- Soon after independence, India and China were involved in differences arising from the Chinese takeover of Tibet in 1950 and the final settlement of the Sino-Indian border.
- China and India were involved in a border conflict in 1962 over competing territorial claims principally in Arunachal Pradesh and in the Aksai Chin region of Ladakh.
- The conflict of 1962, in which India suffered military reverses, had long-term implications for Indo-China relations.
- After the change in China's political leadership from the mid to late 1970s, China's policy became more pragmatic and less ideological.
- Rajiv Gandhi's visit to China in December 1988 provided the impetus for an improvement in Indo-China relations.
- At the global level, India and China have adopted similar policies in international economic institutions like the World Trade Organisation.
- India's nuclear tests in 1998, sometimes justified on the grounds of a threat from China, did not stop greater interaction.

#### Important Terms Association of South-East Asian

**Nations (ASEAN)** – An association created to accelerate economic growth through cultural development and social progress. **ASEAN Community's Three Pillars** – ASEAN Security Community, ASEAN Economic Community and ASEAN Socio-Cultural Community. **ASEAN Way** – An interaction that is informal, non-confrontationist and co-operation to promote super-national structures. **European Union** – A group of European countries founded for common



goals like foreign policy, security policy, home affairs and mutual co-operation. **Marshall Plan** – A plan introduced by USA to provide financial help for the revival of European economy. **Open Door Policy** – The policy adopted to invite investment of capital and technology from abroad.

#### **Organisation for European Economic Co-operation**

(OECEC) – An organisation established to channel aid to west European states to co-operate on trade and economic issues.

**Special Economic Zones (SEZs)** – Zones created for foreign investors to set up their own enterprises.

**Know the Personalities Zhou Enlai** – He was the first Premier of the People's Republic of China, serving from October, 1949 until his death in January, 1976. Zhou served under Chairman Mao Zedong and was instrumental in the Communist Party's rise to power, and later in consolidating its control, forming foreign policy and developing the Chinese economy. A skilled and able diplomat, Zhou served as the Chinese foreign minister from 1949 to 1958. Advocating peaceful co-existence with the West after the stalemated Korean War, he participated in the 1954 Geneva Conference and the 1955 Bandung Conference, and helped orchestrate Richard Nixon's 1972 visit to China. He helped devise policies regarding the bitter disputes with the U.S., Taiwan, the Soviet Union (after 1960), India and Vietnam. **Deng Xiaoping** – He was a Chinese revolutionary and statesman. He was the paramount leader of the People's Republic of China from 1978, until his retirement in 1989. After Chairman Mao Zedong's death, Deng led his country through far-reaching market-economy reforms. While Deng never held office as the head of state, head of government or General Secretary (that is, the leader of the Communist Party), he nevertheless, was responsible for economic reforms and an opening to the global economy.

**Important Dates** **1. June 1948** Implementation of Marshall Plan. **2. April 1951** Establishment of European Coal and Steel Community. **3. March 1957** Establishment of European Economic Community and European Atomic Energy Community. **4. August 8, 1967** Establishment of ASEAN. **5. February 7, 1992** Treaty of Maastricht was signed to establish European Union. **6. January 1993** Single market was created. **7. November 1, 1993** European Union was established. **8. January 2002** The new currency Euro was introduced.

## Chapter 5 Contemporary South Asia

### Topic-1 South Asia

- The expression 'South Asia' includes the countries of Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.
- The mighty Himalayas in the north and the vast India Ocean, the Arabian Sea and the Bay of Bengal in the south, west and east respectively provide a natural insularity to the region, which is largely responsible for the linguistic, social and cultural distinctiveness of the subcontinent.
- The various countries in South Asia do not have the same kind of political systems.
- Despite many problems and limitations, India and Sri Lanka have successfully operated a democratic system since their independence from the British.
- One can point out many limitations of India's democracy, but it is the fact that India has remained a democracy throughout its existence as an independent country. Pakistan and Bangladesh have experienced both civilian and military rulers with Bangladesh

remaining a democracy in the post-Cold War period.

- Pakistan began the post-Cold War period with successive democratic governments.
- Pakistan suffered a military coup in 1999.
- Till 2006, Nepal was a constitutional monarchy.
- In 2006, a successful popular uprising led to the restoration of democracy and reduced the king to a nominal position.
- In Bhutan, the king has initiated plans for its transition to multiparty democracy.
- The Maldives was a Sultanate till 1968 when it was transformed into a republic with a presidential form of government.
- Despite the mixed record of the democratic experience in the South Asian countries, people in all these countries share the aspiration for democracy.

### Topic-2 The Military and Democracy in Pakistan and Bangladesh

- After the adoption of the Constitution in Pakistan, General Ayub Khan took over the administration of the country and soon got himself elected.
- General Ayub Khan gave up the office because of the popular dissatisfaction against him.
- After Ayub Khan, the military took over Pakistan under General Yahya Khan.
- During Yahya's military rule, Pakistan faced the Bangladesh crisis and after a war with India in 1971.
- East Pakistan broke away to emerge as an independent country called Bangladesh.
- An elected government under the leadership of Zulfikar Ali Bhutto came to power in Pakistan from 1971 to 1977.
- The Bhutto government was removed by General Zia-ul-Haq in 1977.
- An elected government was established once again in the year 1988, under the leadership of Benazir Bhutto. In 1999, the army stepped in again and General Pervez Musharraf removed Prime Minister Nawaz Sharif.
- Several factors are responsible for Pakistan's failure in building a stable democracy.
- Sheikh Mujibur Rahman led the popular struggle against West Pakistani domination in Bangladesh.
- Bangladesh became an independent country in the year 1971.
- In 1975, Sheikh Mujibur Rahman got the Constitution amended to shift from parliamentary to presidential form of government.
- Mujibur Rahman also abolished all parties except his own, the Awami League.
- Mujibur Rahman was assassinated in a military uprising in August 1975.
- The new military ruler, Ziaur Rahman, formed his own Bangladesh Nationalist Party and won elections in 1979.
- Ziaur Rahman was also assassinated and other military takeover followed under the leadership of Lt Gen H.M. Ershad.
- Mass public protests made Ershad step down in 1990 and elections were held in 1991. Since then, representative democracy based on multiparty elections had been working in Bangladesh.

### Topic-3 Monarchy and Democracy in Nepal

- Nepal was a Hindu Kingdom in the past and then a constitutional monarchy in the modern period for the last many years.
- The demand for a new democratic constitution was accepted by the king of Nepal in the year 1990 in the wake of a strong pro-democracy movement.

- During the 90s, the Maoists of Nepal were successful in spreading their influence in many parts of Nepal.
- In 2002, the King abolished the Parliament and dismissed the government, thus ending even the limited democracy that existed in Nepal.
- In April 2006, there were massive, country wide, pro-democracy protests.
- The largely non-violent movement was led by the Seven Party Alliance, the Maoists and social activists.

#### Topic-4 Ethnic Conflict and Democracy in Sri Lanka

- After its independence in 1948, politics in Sri Lanka was dominated by forces that represented the interest of the majority Sinhala community.
- Sinhala were hostile to a large number of Tamils who had migrated from India to Sri Lanka and settled there.
- The neglect of Tamil concerns led to militant Tamil nationalism.
- From 1983 onwards, the militant organisation, the Liberation Tigers of Tamil Eelam (LTTE) has been fighting an armed struggle with the army of Sri Lanka and demanding 'Tamil Eelam' or a separate country for the Tamils of Sri Lanka.
- In 1987, the Indian government got directly involved in the Sri Lankan Tamil question.
- In 1989, the Indian Peace Keeping Force (IPKF) pulled out of Sri Lanka without attaining its objective.
- In spite of the ongoing conflict, Sri Lanka has registered considerable economic growth and recorded high levels of human development.
- Sri Lanka was one of the first developing countries to successfully control the growth rate of population.

#### Topic-5 Conflicts Between India and Pakistan

- Soon after independence, India and Pakistan got embroiled in a conflict over the fate of Kashmir.
- Wars between India and Pakistan in 1947-48 and 1965 failed to settle the matter.
- In 1971, India won a decisive war against Pakistan but the Kashmir issue remained unsettled.
- India's conflict with Pakistan is also over strategic issues like the control of the Siachen glacier and over acquisition of arms.
- After testing nuclear explosion, India and Pakistan seem to have built a military relationship in which the possibility of a direct and full-scale war was declined.
- India and Pakistan also have had problems over sharing of river waters.
- India and Pakistan are not in agreement over the demarcation line in Sir Creek in the Rann of Kutch.

#### Topic-6 India and Its Relations with Neighbours

- The governments of India and Bangladesh have had differences over several issues including the sharing of the Ganga and Brahmaputra river waters.
- Bangladeshi governments have felt that the Indian government behaves like a regional bully over the sharing of river waters, encouraging rebellion in the Chittagong Hill Tracts.
- Despite differences, India and Bangladesh do co-operate on many issues.
- Nepal and India have a very special relationship that has very few parallels in the world.
- The government of India has often expressed displeasure at the warm relationship between Nepal and China and at the Nepal government's inaction against anti-Indian elements.

- Despite differences, trade, scientific co-operation, common natural resources, electricity generation and interlocking water management grids hold the two countries together.
- The difficulties in the relationship between India and Sri Lanka are mostly over ethnic conflict in the island nation.
- India enjoys a very special relationship with Bhutan too and does not have any major conflict with Bhutanese government.
- India's relations with the Maldives remains warm and cordial.

#### Topic-7 Peace and Co-operation in South Asia

- In spite of many conflicts, the states of South Asia recognise the importance of co-operation and friendly relationship among themselves.
- The South Asian Association for Regional Co-operation (SAARC) is a major regional initiative by the South Asian states to evolve co-operation through multilateral means.
- SAARC members signed the South Asian Free Trade Agreement (SAFTA) which promised the formation of a free trade zone for the whole of South Asia.
- Although India-Pakistan relations seem to be a story of endemic conflict and violence, there have been a series of efforts to manage tensions and build peace.

**Important Terms** **Bilateral Talks** – The talks that involve the two countries without any mediation by a third party. **Geo Politics** – The Association of countries that are bound with each other geographically and their interests are also interlinked with each other economically and politically.

**Indian Peace Keeping Force (IPKF)** – The Force sent by India in Sri Lanka, to support the demand of Tamils to be recognised. **Liberation Tigers of Tamil Eelam (LTTE)** – A group in Sri Lanka that demanded a separate state for the Tamils. **Seven Party Alliance** – An alliance of seven parties in Nepal, which demanded an end to monarchy in the country.

**South Asian Association for Regional Co-operation (SAARC)** – An association of South Asian countries aiming at mutual trust and understanding. **South Asian Free Trade Agreement (SAFTA)** – An agreement to trade free from custom restrictions and duties by its member states.

**Know the Personalities** **Zulfikar Ali Bhutto:** A Pakistani politician and statesman who served as the 9<sup>th</sup> Prime Minister of Pakistan from 1973 to 1977, and prior to that as the 4<sup>th</sup> President of Pakistan from 1971 to 1973. He is revered by his followers in Pakistan as Quaid-i-Awam. He was also the founder of the Pakistan People's Party (PPP) and served as its Chairman until his execution in 1979. **Mohammed Ayub Khan:** Widely known as Ayub Khan, he was a Pakistani politician and a five-star rank Army General who served as the second President of Pakistan from 1958, until being forced into resignation amid a popular uprising in East Pakistan in 1969. He is noted for being the first and only Field Marshal as well as the first martial law ruler who assumed the presidency after exiling President Iskander Mirza, when the latter imposed the martial law against the Feroze government in 1958. **Sheikh Mujibur Rahman:** The founding leader of Bangladesh. He served twice as the country's President and was its strongman premier between 1972 and 1975. Rahman was the leader of the Awami League. He is popularly known as the Bangabandhu (Friend of Bengal). He is credited as the central figure in Bangladesh's liberation movement and is considered the founding father of Bangladesh. His daughter Sheikh Hasina is the current Prime Minister of Bangladesh.

**Important Dates** **1. 1947** Emergence of India and

Pakistan as independent states after the end of British rule. **2. 1947–1971** Bangladesh was a part of Pakistan and known as East Pakistan. **3. 1948** Sri Lanka got independence. Indo–Pak conflict over Kashmir started. **4. September 1960** Indus Waters Treaty signed by India and Pakistan. **5. 1962** Border conflict between India and China. **6. 1965** Indo–Pak War **7. 1966** Tashkent Agreement signed. **8. December 1971** Indo–Pak War. Liberation of Bangladesh. **9. July 1972** Shimla Agreement signed by India and Pakistan. **10. May 1974** Nuclear test conducted by India. **11. December 1985** SAARC Charter signed. **12. 1987** Sri Lanka operations by IPKF. Indo-Sri Lanka Accord. **13. 1988–1991** Restoration of democracy in Pakistan, Bangladesh and Nepal. **14. December 1996** Ganga Waters Treaty signed between India and Bangladesh. **15. June–July 1999** Kargil War between India and Pakistan.

## Chapter 6 International Organisations

### Topic-1 Need of International Organisations

- The UN is generally regarded as the most important international organisation in today's world.
- In the eyes of the many people all over the world, the UN is indispensable and represents the great hope of humanity for peace and progress.
- International organisations are not the answer to everything, but they are important.
- International organisations help with matters of war and peace.
- International organisations help countries to co-operation and to make better living conditions for all of us.
- An international organisation can be important in the context that it resolves conflicts and differences without war.
- An international organisation is not super-state with authority over its members.
- International organisation is created by and responds to states and can help member states resolve their problems peacefully.
- International organisations are also helpful in solving global issues.
- An international organisation can help produce information and ideas about how to co-operate.
- With the end of the Cold War, the role of the UN has changed.

### Topic-2 UN and Reforms in the UN after the Cold War

- After the First World War, the League of Nations was born to avoid war.
- Despite its initial success, the League of Nations could not prevent the Second World War (1939–45).
- The UN was established in 1945 after the Second World War as successor to the League of Nations.
- The UN was set up through signing of the United Nations Charter by 51 states.
- The UN's objective is to prevent international conflict and facilitate co-operation among states.
- In the UN General Assembly, all members have one vote each.
- In the UN Security Council, there are five permanent members.
- United States, Russia, United Kingdom, France and China are the permanent members.

- The UN's most visible and public figure and the representative head, is the Secretary General.
- The UN consists of many different structures and agencies.
- War and peace and differences between member states are discussed in the General Assembly as well as the Security Council.
- Reform and improvement are fundamental to any organisation to serve the needs of a changing environment.
- Two basic kinds of reforms which face the UN are the reform of the organisation's structure and processes and a review of the issues that fall within the jurisdiction of the organisation.
- On the reform of structures and processes, the biggest discussion has been on the functioning of the Security Council.

### Topic-3 Reform of Structures and Processes

- In 1992, the UN General Assembly adopted a resolution which reflected three main complaints.
- On 1st January, 1997, the UN Secretary, General Kofi Annan initiated an enquiry into how the UN should be reformed.
- New criteria have been proposed for new permanent and non-permanent members of the Security Council.
- Governments saw advantages and disadvantages in some criteria and in others as per their interests and aspirations.
- In Security Council, there are five permanent members and ten non-permanent members.
- The five permanent members have the privilege of veto power.
- The non-permanent members are elected for only two years at a time and give way after that period to newly elected member.
- The non-permanent members are elected in a manner so that they represent all continents of the world.
- The non-permanent members do not have the veto power.

### Topic-4 Jurisdiction of the UN

- As the UN completed 60 years of its existence, the heads of all the member-states met in September 2005 to celebrate the anniversary and review the situation.
- Some steps were recommended to be taken to make the UN more relevant in the changing context.
- Some recommendations made by the meeting were contentious.
- It is not possible to rank the problems as there are many numbers of conflicts all over the world.
- It is not possible for the UN to intervene in each and every conflict.
- So many countries are still part of the developing world, how realistic is it for the UN to achieve an ambitious set of goals such as those listed in the Millennium Development Goals.

### Topic-5 India and the UN Reforms

- India has supported the restructuring of the UN on several grounds.
- India believes that a strengthened and revitalised UN is desirable in changing world.
- India also supports an enhanced role for the UN in promoting development and co-operation among states.
- One of India's major concerns has been the composition of the Security Council which has remained largely static while the UN General Assembly membership has expanded considerably.
- India also argues that an expanded Council with more



representation will enjoy greater support in the world community.

- India supports an increase in the number of both permanent and non-permanent members.
- India itself wishes to be permanent member in a restructured UN.
- Despite India's wish to be a permanent veto-wielding member of the UN, some countries question its inclusion.

### Topic-6 Significance of the UN in a Unipolar World

- Among the concerns about the reform and restructuring of the UN has been the hope of some countries that changes could help the UN cope better with a unipolar world.
- The US power cannot be easily checked.
- With the disappearance of the Soviet Union, the US stands as the only superpower and its military and economic power allows it to ignore the UN or any other international organisation.
- As the single largest contributor to the UN, the US has unmatched financial power.
- The fact that the UN is physically located within the US territory gives Washington additional sources of influence.
- The UN is an imperfect body, but without it the world would be worse off.

**Important Terms** **Peace-Keeping Operation** – A mechanism for restoring peace and security by sending the UN-controlled troops in the affected area. **Secretary General** – The representative head of the United Nations to prepare an annual record of the United Nations' activities. **UN Charter** – The Constitution of the United Nations to deal with the objectives of the United Nations. **United Nations Children's Emergency Fund (UNICEF)** – UN agency to deal with children welfare. **United Nations Educational, Scientific and Cultural Organisation (UNESCO)** – UN agency to deal with the promotion of education, science and culture. **Veto** – A negative vote enjoyed by five permanent members of the Security Council to stop a decision. **World Health Organisation (WHO)** – UN agency to deal with matters related to health.

**Know the Personalities** **Trygve Lie**: He was a Norwegian politician, labour leader, government official and author. He served as Norwegian Foreign Minister during the critical years of the Norwegian government in exile in London from 1940 to 1945. From 1946 to 1952, he was the first Secretary General of the United Nations. Lie earned a reputation as a pragmatic, determined politician. **U Thant**: He was a Burmese diplomat and the third Secretary General of the United Nations from 1961 to 1971, the first non-European to hold the position. He held the office for a record 10 years and 1 month (3,684 days). **Kofi Annan**: He is a Ghanaian diplomat who served as the seventh Secretary General of the United Nations from January 1997 to December 2006. Annan and the UN were the co-recipients of the 2001 Nobel Peace Prize. He is the founder and chairman of the Kofi Annan Foundation, as well as chairman of The Elders, an international organisation founded by Nelson Mandela.

**Important Dates** **1. August 1941** Atlantic Charter signed by the USA and the UK **2. January 1942** 'Declaration by United Nations' signed **3. December 1943** Declaration of Three Powers (the US, the UK and Russia) at Tehran Conference **4. February 1945** Big Three (Roosevelt, Churchill, Stalin) Yalta Conference **5. June 26, 1945** UN Charter signed by 50 nations **6. October 24, 1945** UN was founded (celebrated as UN

Day) **7. October 30, 1945** India joined the UN

## Chapter 7 Security In The Contemporary World

### Topic-1 Meaning of Security

The basic meaning of security is freedom from threats. Those who study security generally say that only those things that threaten 'core values' should be regarded as a matter of interest in discussions of security. Security relates only to extremely dangerous threats—threats that could so endanger core values that those values would be damaged beyond repair if we did not do something to deal with situation. There are two notions of security, traditional and non-traditional.

### Topic-2 Traditional Notions of Security

- Most of the time, when we read and hear about security, we are talking about traditional, national security conceptions of security.
- In the traditional conception of security, the greatest danger to a country is from military threats.
- The source of military threat is another country, which by threatening military action, endangers the core values of sovereignty, independence and territorial integrity.
- In responding to the threat of war, a government has three basic choices—to surrender, to prevent or to defend.
- The actual security policy is concerned with preventing war, which is called deterrence and with limiting or ending war, which is called defence.
- Traditional security policy has a third component called balance of power.
- Governments are very sensitive to the balance of power between their country and other countries.
- A good part of maintaining a balance of power is to build up one's military power.
- A fourth and related component of traditional security policy is alliance building.
- Countries form alliances to increase their effective power in relation to another country or alliance.
- Alliances are based on national interests and can change when national interests change.
- Traditional security must also concern itself with internal security.
- The Cold War between the USA and Soviet Union was responsible for approximately one-third of all wars in the post-Second World War period.
- The security challenges faced by the newly independent countries of Asia and Africa were different from the challenges faced by Europe.
- Internally, the new states worried about threats from separatist movements which wanted to form independent countries.
- In traditional security, there is recognition that co-operation in limiting violence is possible.
- Disarmament, arms controls and confidence building are forms of co-operation.

### Topic-3 Non-traditional Notions of Security

- Non-traditional notions of security go beyond military threats to include a wide range of threats and dangers affecting the conditions of human existence.
- Non-traditional notions of security have been called 'human security' or 'global security'.
- Human security is about the protection of people more than the protection of states.

- Proponents of the 'narrow' concept of human security focus on violent threats to individuals.
- Proponents of the 'broad' concept of human security argue that the threat agenda should include hunger, disease and natural disasters because these kill far more people than war, genocide and terrorism combined.
- The idea of global security emerged in the 1990s in response to the global nature of threats such as global warming, international terrorism and health epidemics like AIDS and bird flu and so on.

#### Topic-4 Different Sources of Threats and Co-operative Security

- Terrorism, human rights, global poverty, health epidemics are different sources of threats.
- Terrorism refers to political violence that targets civilians deliberately and indiscriminately.
- Terrorist groups seek to change a political context or condition that they do not like by force or threat of force.
- The classic cases of terrorism involve hijacking planes or planting bombs in trains, cafes, markets and other crowded places.
- Human rights come to be classified into four types: political, economic, social and ethnic.
- Global poverty is another source of insecurity.
- The disparity of richness and poverty contributes to the gap between the Northern and Southern countries of the world.
- Poverty in the South has also led to large-scale migration to seek a better life, especially better economic opportunities in the North.
- People who have fled their homes but remain within national borders are called 'internally displaced people'.
- ----- Health epidemics such as HIV-AIDS, bird flu, and severe acute respiratory syndrome (SARS) have rapidly spread across countries through migration, business, tourism and military operations.
- Dealing with many of the non-traditional threats to security requires cooperation rather than military confrontation.
- Co-operation may be bilateral, regional, continental or global.
- Co-operative security may involve the use of force as a last resort.

#### Topic-5 India's Security Strategy

- India has faced traditional and non-traditional threats to its security that have emerged from within as well as outside its borders.
- India's security strategy has four broad components.
- The first component is strengthening its military capabilities because India has been involved in conflicts with its neighbours.
- The second component of India's security strategy has been to strengthen international institutions to protect its security interests.
- The third component of Indian security strategy is geared towards meeting security challenges within country.
- There has been an attempt in India to develop its economy in a way that the vast mass of citizens are lifted out of poverty and misery and huge economic inequalities are not allowed to exist.

**Important Terms** **Arms Control** – The policy to regulate acquisition of weapons. **Disarmament** – The policy that bounds the state to give up certain kinds of weapons to avoid mass destruction. **Global Poverty** – A measure to categorise a country suffering from low incomes and less economic growth as less developed or developing country. **Migration** – The movement of human resources from one state to another on

account of some particular reason. **Security** – An essence or existence of human life to protect from external or internal threats.

#### Know the Personalities **Henry Dunant and Gustave Moynier**

Henry Dunant and Gustave Moynier were the founders of the International Committee of Red Cross in 1863 in Geneva. Its 25-members committee has a unique authority under international humanitarian law to protect the life and dignity of the victims of international and internal armed conflicts. The ICRC was awarded the Nobel Peace Prize on three occasions (in 1917, 1944 and 1963).

**Important Dates** **1. 1946–1991** A twelve fold rise in the number of civil wars **2. 1968** Signing of Nuclear Non-Proliferation Treaty (NPT) **3. 1972** Signing of Treaty of Anti-Ballistic Missiles (ABM) **4. 1972** Biological Weapons Convention (BWC) convened **5. 1992** Chemical Weapons Convention (CWC) convened

## Chapter 8 Environment And Natural Resources

### Topic-1 Global Environmental Norms and Global Commons

- Environmental concern in global politics covers losing fertility of agricultural land, overgrazing, depletion of water resources as well as loss of biodiversity, real danger to ecosystem and coastal pollution, deteriorating of marine environment, etc.
- The Earth Summit held in Rio de Janeiro, Brazil in 1992 revealed different views, *i.e.*, global North (the First World countries) and global South (the Third World countries). Global North was concerned with the issues of ozone depletion and global warming and Global South focused on economic development and environment management by Agenda 21.
- Commons are those resources which are not owned by anyone but rather shared by a community.
- Global commons refer to the areas or regions which require common governance by international community on major problems of ecological issues like discovery of ozone hole over Antarctica, the Earth's atmosphere and ocean floor associated with technology and industrial development.
- The history of outer space as a global commons shows that the management of these areas is thoroughly influenced by North–South inequalities. The special needs of the developing countries must be taken into account in the development, application and interpretation of rules of international environmental law. This argument was accepted in the Rio Declaration at the Earth Summit in 1992 and is known as the principle of 'common but differentiated responsibilities'.
- The Rio Declaration at the Earth Summit in 1992 adopted the principle of common but differentiated responsibilities, referring special needs of developing countries in the fields as development, application and interpretation of rules of environmental law to protect environment by both developing nations in a responsible manner.
- The 1992 United Nations Framework Convention on Climate Change (UNFCCC) also emphasised to protect the climate system on the basis of equity and in accordance with their common but differentiated responsibilities and capabilities.
- The Kyoto Protocol is an international agreement setting targets for industrialised countries to cut their greenhouse gas emissions. This protocol was agreed to

in 1997 in Kyoto, Japan based on the principles defined in UNFCCC.

- Common property represents common property for the group.
- Common property resources refer to a group who has both the rights and duties with respect to nature, levels of use and the maintenance of a given resource with mutual understanding and practices, *i.e.*, management of sacred groves on state-owned forest land.

### Topic-2 India's Stand on Environmental Issues

- India plays a dominating role in the environmental issues as it signed and ratified the Kyoto Protocol, 1997 in August 2002 to follow common but differentiated responsibilities.
- India is wary of its discussions with UNFCCC about introducing binding commitments. It participated in global efforts by introducing National Auto Fuel Policy, Electricity Act and National Mission on Biodiesel.
- India supports to adopt a common position by the SAARC countries on major environmental issues to have a greater say region wise.
- Environmental movements are the movements of groups which are environmentally conscious to challenge environmental degradation at national or international level. These movements are categorised as forest movements, movements against mining and mineral industry for creating water pollution and anti-dam movement.
- The forest movements of the South in Mexico, Chile, Brazil, Malaysia, Indonesia, continental Africa and India have faced enormous pressures.
- Another group of movements are those involved in struggles against mega-dams. In every country, where a mega-dam is being built, one is likely to find an environmental movement opposing it.
- The early 1980s witnessed the first anti-dam movement launched in the North, by the name of campaign to save the Franklin river and its surrounding forests in Australia. India has had some of the leading anti-dam, pro-river movements. Narmada Bachao Aandolan is one of the best known of these movements.

### Topic-3 Resource Geopolitics, Indigenous People and Their Rights

- Resource geopolitics is all about who gets what, when, where and how. The practices of neo-colonialism spread on a large scale and throughout the cold war, industrialised countries adopted methods to ensure a steady flow of resources by deployment of military forces near exploitation sites and efforts to prop up friendly governments.
- The global economy relied on oil as a portable and

essential fuel. The history of petroleum is the history of war and struggle. Water is another important resource relevant to global politics. Regional variations and increasing scarcity of fresh water may also lead to conflicts in the world of politics.

- Indigenous people bring the issues of environment, resources and politics together. Indigenous people live with their social, economic, cultural customs in particular areas who speak of their struggle, agenda and rights to have equal status, *i.e.*, island states in Oceania region, Central and South America, Africa, India and southeast Asia.
- In India, the definition of indigenous people is usually applied to the Scheduled Tribes who constitute 8.6% (according to National Census, 2011) of the total population of the country.
- The World Council of Indigenous Peoples was formed in 1975 which became the first of 11 indigenous NGOs to receive consultative status in the United Nations.

**Important Terms Agenda 21** – The list of practices recommended at the Earth Summit in reference of development to attain sustainability. **Common Property Resources** – It means that the resources are owned commonly as a group and each member of the group has his share of rights and responsibilities. **Differentiated Responsibility** – The need for Global North to control emission of greenhouse gas effect as compared to Global South as the latter started developing quite late. **Earth Summit** – A conference held in Rio De Janeiro, Brazil in June 1992 on Environment and Development to deal with various environmental problems. **Indigenous People** – It comprises the descendants of people who inhabited the present territory of a country at the time when persons of different cultures arrived there from various parts of the world. **Kyoto Protocol** – An international agreement that set targets for industrial countries to cut their greenhouse gas emissions as agreed to in Kyoto, Japan, based on the principles set out in UNFCCC. **Resource Geopolitics** – It means who gets what, when, where and how much of the resources. **United Nations Framework Convention on Climate Change (UNFCCC)** – The UN convention of 1992 provided that parties should act to protect the climate system with common but differentiated responsibilities.

**Important Dates** **1. 1959** Signing of the Antarctica Treaty **2. 1975** Formation of World Council of Indigenous Peoples **3. 1987** Agreement of Montreal Protocol **4. 1992** Agreement of Antarctica Environmental Protocol **5. June 1992** First Earth Summit was convened **6. 1997** Agreement of Kyoto Protocol **7. 2001** Energy Conservation Act was passed **8. August 2002** India became party to Kyoto Protocol **9. 2003** Electricity Act was passed **10. June 2005** G-8 Meeting was convened **11. 2016** Second High Level Summit on Nutrition convened in Rio de Janeiro



# NCERT Class 12

## Politics in India Since Independence

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 Globalisation

##### Topic-1 Globalisation-Causes and Consequences

- Globalisation deals with the flows. These flows could be of various kinds, *i.e.*, ideas moving from one part of the world to another, capital shunted between two or more places, commodities being traded across borders, and people moving in search of better livelihood to different parts of the world.
- As a multidimensional concept, it has political, economic and cultural manifestation and these must be distinguished separately.
- Globalisation may have negative impacts also as it failed to generate sufficient employment. Modern methods of cultivation are not acquainted to less educated persons. It creates income inequality and exploits natural resources and labour force.
- **Causes of globalisation:** It is not caused by any single factor. It is the result of historical factors, technological innovations, liberalisation of foreign trade and investment policies, and opening of multinational companies.
- The invention of the telephone, the microchip, etc, in more recent times has revolutionised communication between different parts of the world.
- The ability of ideas, capital, commodities and people to move more easily from one part of the world to another part of the world has been made possible largely by technological advances.
- **Consequences of globalisation:** The various consequences of globalisation can be categorised as:
  - **Political consequences:** (i) Globalisation results in an erosion of powers of the state, that is, the ability of the government to do what they do. (ii) Globalisation does not always reduce state capacity. The primacy of the state continues to be unchallenged on the basis of political community.
  - **Economic consequences:** (i) Usually, economic globalisation involves greater economic flows among different countries of the world. Economic flows in various forms, like commodity, capital, people and ideas, prompts rich countries to invest their money in countries other than their own. It also draws attention towards the role of IMF and WTO in determining economic policies across the world. (ii) Advocates of economic globalisation argue that it generates greater economic growth and well-being for larger sections of the population when there is de-regulation. Greater trade among countries allows each economy to do what it does best. This would benefit the whole world.
  - **Cultural consequences:** Cultural globalisation

emerges and enlarges our choices and modifies our culture without overwhelming the traditional norms. Those who make this argument often draw attention to the McDonaldisation of the world, with cultures seeking to buy into the dominant American dream. The burger is no substitute for a masala dosa, and therefore, does not pose any challenge.

##### Topic-2 India and Globalisation

- Globalisation has occurred in earlier periods in history in different parts of the world. Flows pertaining to the movement of capital, commodities, ideas and people go back several centuries in Indian history.
- During the colonial period, as a consequence of Britain's imperial ambitions, India became an exporter of primary goods and raw materials and a consumer of finished goods. After independence, because of this experience with the British, we decided to make things ourselves rather than relying on the others. We also decided not to allow others to export to us so that our own producers could learn to make things.
- In 1991, responding to a financial crisis and to the desire for higher rates of economic growth, India embarked on a programme of economic reforms that has sought increasingly to deregulate various sectors including trade and foreign investment.
- Critics of globalisation make a variety of arguments. Those on the left argue that contemporary globalisation represents a particular phase of global capitalism that makes the rich richer and the poor poorer.
- Politically, critics of globalisation also fear the weakening of the state. Economically, they want a return to selfreliance and protectionism, at least in certain areas of the economy. Culturally, they are worried that traditional culture will be harmed and people will lose their age old values and ways.
- Anti-globalisation movements too participate in global networks, allying with those who feel like them in other countries.
- In 1999, at the World Trade Organisation Ministerial Meeting, there were widespread protests at Seattle alleging unfair trade practices by the economically powerful states. It was argued that the interests of the developing world were not given sufficient importance in the evolving global economic system.
- The World Social Forum (WSF) is another global platform, which brings together a wide coalition composed of human activists, environmentalists, labour, youth and women activists opposed to neo-liberal globalisation.
- Resistance to globalisation in India has come from different quarters. There have been left wing protests to economic liberalisation voiced through political parties as well as through forums like the Indian Social Forum.
- Resistance to globalisation has also come from the

political right taking the form of objecting particularly to various cultural influences — ranging from the availability of foreign television channels provided by cable networks, celebration of Valentine's Day, and westernisation of the dress tastes of girl students in schools and colleges.

**Important Terms Cultural Hetrogenisation** – It signifies cultural differences and distinctive nature of cultures to be generated by globalisation. **Cultural Homogenisation** – It signifies uniform cultures all around the world. **Globalisation** – It signifies integration of an economy with the economies of other countries under the process of free flow of trade and capital. **Liberalisation** – It signifies relaxation of government rules and regulations relating to activities in service and industrial sector. **Privatisation** – It allows private sector companies to produce goods and services in a country. **Welfare State** – A state where the government regulates the means of production in the interest of the people. **World Social Forum** – A global platform to bring together a wide coalition of human rights activists, environmentalists and women activists.

**Important Dates** 1. 1991 Program of Economic reforms embarked upon to deregulate various sectors 2. 1999 World Trade Organisation's Ministerial Meeting convened 3. 2001 First World Social Forum meeting convened 4. 2004 Fourth World Social Forum meeting convened 5. 2007 Seventh World Social Forum meeting convened

## Chapter 2 Challenges Of Nation- Building

### Topic-1 Challenges of Nation-Building

- **"Tryst with Destiny"** – The famous speech of Pt. Jawaharlal Nehru, the first Prime Minister of India, on the midnight of India's independence, 14th-15th August 1947.
- **Challenges before India** – India got independence with a very difficult situation upfront. The three main challenges posed before independent India were to shape a united country, to develop democratic practices and to ensure removal of economic evils like poverty, unemployment, instability, etc.

### Topic-2 Legacy of Partition

- **Partition of India:** On 14th-15th August 1947, India was partitioned into two nation states – India and Pakistan. This was based on Two-Nation theory propounded by Muslim League. Initially, Congress did not accept this theory but in 1940s, gave consent for Partition of India.
- **Problems of Partition:** Partition of India into two nation states was not easy. It faced many difficulties.
- All the Indian Muslims did not want to shift to Pakistan.
- Muslim population was concentrated in both Eastern and Western parts of erstwhile British India. There was no possible way to unite these areas.
- The Muslim as well as non-Muslim population was concentrated in various provinces of Punjab and Bengal. A partition of country meant a partition of these provinces also.
- The likely difficulties that might be faced by minority population in both the newly developed nation states.
- **Results of Partition:** Though the Partition of British India was foreseen, yet it resulted in the largest, most tragic and highly unplanned partition of a nation. It resulted in communal riots between Hindus and Muslims, torture and mass killing of people, separation of families, increase in number of refugees on both sides of the border, economic recession, unemployment, poverty, etc.

- **Effect of Mahatma Gandhi's death:** Mahatma Gandhi's death on January 30, 1948 put an end to communal riots taking place on both sides of the border.
- **Stand of Government of India:** Indian Government believed in communal harmony and equality of religion for all. This highly important belief also found its place in the Constitution of India where India was declared a secular nation and the Fundamental Right of Right to Religion was given to all citizens of India.

### Topic-3 Organisation and Reorganisation of States

- **Integration of Princely States:** With Partition and independence of India, the British Crown terminated its paramountcy over princely states and gave them choice to join India or Pakistan or declare themselves as independent nations.
- **Stand of Princely States:** The Ruler of Travancore followed by the Nizam of Hyderabad declared themselves as independent. The Nawab of Bengal was also not keen to join India.
- **Approach of Government of India:** India's then Deputy Prime Minister and Home Minister, Sardar Vallabhbhai Patel reached out to princely states, negotiated with them and diplomatically brought them under Indian Union. The only four difficult accessions were those of Hyderabad, Junagadh, Manipur and Kashmir.
- **Accession of Hyderabad:** Being the largest princely state, the Nizam needed to be convinced. The society of Hyderabad opposed the rule of Nizam. On demand of public, Indian Government interfered and in September 1948, Nizam's forces, called Razakars, were controlled and Hyderabad was accessed to Indian Union.
- **Accession of Manipur:** Maharaja of Manipur, Bodhachandra Singh, declared Manipur as a Constitutional Monarchy and held the first elections under Universal Adult Franchise. In September 1949, Government of India pressurised Maharaja of Manipur to sign an agreement and become a part of India.
- **Reorganisation of States:** After integration of princely states, the internal boundaries of the states needed to be defined. British had drawn boundaries according to their administrative convenience. The newly formed Indian Government defined state boundaries on linguistic principles. The States Reorganisation Act, 1956 created 14 States and 6 Union Territories.

**Important Terms Two-Nation Theory:** Theory propounded by Muslim League and Muhammad Ali Jinnah demanding partition of country resulting in separate nation states for Hindus and Muslims. **Princely States:** The states which were ruled by Indian Kings and Princes but were under economic and political supremacy of British Crown. **Nizam:** Urdu or Persian title given to a Muslim King meaning the wealthiest person of the world. **Razakars:** The paramilitary forces sent by Nizam of Hyderabad to quash people's demand for joining Indian Union. **States Reorganisation Commission:** The Commission formed by Indian Government in 1953 to define boundaries of Indian states.

### Know the Personalities Mahatma Gandhi:

Popularly called by the people as 'Father of the Nation', he played an important role in negotiating with British for India's independence in a non-violent way. He launched peaceful movements like 'Satyagraha', 'Non Co-Operation', 'Quit India', etc. to force British make India free. **Jawaharlal Nehru:** He was the President of Indian National Congress when India gained independence. He became the first Prime Minister of free India. **Sardar Vallabhbhai Patel:** As the first

Home Minister of free India, he played a vital role in integration of princely states, particularly Hyderabad, Junagadh, Kashmir and Manipur, to become part of the Indian Union. **Muhammad Ali Jinnah:** He was the founder President of Muslim League and propounded the Two-Nation Theory in which he proposed partition of India into two separate nation states for Hindus and Muslims.

### Important Dates 1. Midnight of 14<sup>th</sup> - 15<sup>th</sup>

**August, 1947** India got independence, Partition of the country into two nation states – India and Pakistan **2. 30<sup>th</sup> January, 1948** Mahatma Gandhi was shot dead by Nathuram Godse **3. 26<sup>th</sup> January, 1950** Formation of new states of Assam and Uttar Pradesh **4. 1953** Setting up of States Reorganisation Commission **5. 1<sup>st</sup> October, 1953** Formation of new state of Andhra Pradesh **6. 1956** State Reorganisation Act enforced creating 14 states and 6 union territories **7. 1<sup>st</sup> January, 1956** Formation of new state of West Bengal **8. 1<sup>st</sup> May, 1960** Formation of new states of Maharashtra and Gujarat **9. 1<sup>st</sup> December, 1963** Formation of new state of Nagaland **10. 1966** Formation of new states of Haryana and Himachal Pradesh. **11. 1972** Formation of new states of Meghalaya, Manipur and Tripura **12. 1987** Formation of new states of Mizoram and Arunachal Pradesh **13. 2000** Formation of new states of Chhattisgarh, Uttaranchal (renamed as Uttarakhand) and Jharkhand **14. 2<sup>nd</sup> June, 2014** Formation of new state of Telangana

## Chapter 3 Era Of One-Party Dominance

### Topic-1 Building Democracy During First Three General Elections

#### • Challenges before India

- Although the democratic challenges before India immediately after independence were not difficult, yet the leaders decided to choose a difficult path.
- The Indian leaders understood the important role played by politics in democracy. They decided to use politics for two purposes – to solve the problems and to follow public interest.
- Election Commission of India was established in January, 1950 (after adoption of Constitution of India) with Sukumar Sen as the first Chief Election Commissioner of India.

#### • First General Elections

- The first general elections of India proved to be a major success because of the participation and competitiveness of the candidates and fair results. The critics which were of the view that it is not advisable to conduct elections in the stage of poverty proved wrong.
- The first general elections were also important keeping in mind the size of the country and the spread of the electorate.
- The first general elections were unusual being a big test for a country passing through a stage of immense poverty and illiteracy.
- The Times of India published an article on how the results and success of first general elections have shut the mouth of critics of the universal adult franchise system.

### Topic-2 Dominance at National and State Levels

#### • The Congress Dominance

- From being a pressure group of newly educated and commercial classes in 1885, the Congress transformed to

a mass movement in 20<sup>th</sup> century and subsequent transformation into India's largest political party resulted in the Congress dominance.

- The victory of Congress in first general elections, emergence of Jawaharlal Nehru as the most popular and charismatic leader was not a surprise to anyone.
- The only opposition party at that time was Communist Party of India which won only 16 seats nationwide.
- Even after such a huge victory, Congress was not in power in various states like Orissa (now Odisha), Madras (now Chennai) and Kerala.

#### • Nature of Congress Dominance

- In other democracies of the world, there was dominance of one party at the cost of compromising with the democracy. But the situation in India was different as the dominance of Congress was purely under democratic conditions.
- Even after emergence of competing parties, Congress managed to win first three general elections continuously in a free and fair format.
- One of the reasons for the dominance of Congress in general elections was the historical view of electorate considering Congress as the only reason for success of India's struggle for independence from British rule.
- Another reason was the successful network of Congress in pre-independence as well as post-independence length and breadth of the country.

### Topic-3 Major Opposition Parties and Congress Coalition

- **Coalition Policy of Congress:** Though Congress Party was formed by elite educated class but with involvement of masses, its social base widened. The inclusion of different castes, cultures, etc. led to contradictory views but Congress started assimilated the ideas and developed policies keeping in mind the benefit of majority view.

#### • Benefit of Coalition Policy of Government –

- Broadened and strengthened the nationwide base.
- Developed a tolerance for internal differences.
- Ambitions of various groups and their leaders were accommodated.
- Developed the image of a moderate party due to ideological stands of factions.
- Due to factions within the party which indirectly represented the ideology of opposition parties, for many years, Congress acted as both the ruling party as well as the opposition in the Indian democratic setup.
- **Rise of Opposition Parties:** There had been many small and regional opposition parties in India even at the time of first general elections. The criticism of government policies by these opposition parties prevented Congress from becoming a monarchy. It was the golden phase of Indian democracy when the leaders of ruling party and opposition had respect for each other. With the ever widening base of Congress Party, slowly its ideological policies and political power declined which strengthened the role and engagement of opposition parties in the next phase of Indian democracy.

#### • Major Opposition Parties:

- **Socialist Party:** The mass movement of Indian National Congress in 1934 sowed the seeds for the formation of Socialist Party. This party was formed by Acharya Narendra Dev and separated from Congress in 1948 on ideological differences.
- **The Communist Party of India:** A secular, modern and authoritarian party founded by a communist leader (earlier worked for Congress), A. K. Gopalan in 1939.



• **Bharatiya Jana Sangha:** The party was formed in 1951 under the leadership of Shyama Prasad Mukherjee. It comprised of many leaders from the Rashtriya Swayamsevak Sangh (RSS), and was considered to be a branch of RSS for a long time. The party was formed with the ideology of one country, one culture and one nation. The party adopted the slogan of “Akhand Bharat” and earlier worked on the grounds of reunion of India and Pakistan.

• **Swatantra Party:** The party was formed in August 1959 under the leadership of C. Rajagopalachari, K. M. Munshi, N. G. Ranga and Minoo Masani. The party was formed with an ideology of advocating a free economy and minimum intervention of the government. It propounded stronger relations with USA instead of erstwhile USSR.

**Important Terms** **Charismatic Leader Oriented Party** – A party in which the leader is the center and nucleus of every decision. **Electronic Voting Machine (EVM)** – A machine used to record voters’ preference as to choosing a candidate / party through an electronic device, used at the time of elections. **Factions** – Groups formed within the party due to ideological differences but prefer to be a part of the party rather than splitting and forming an opposition party. **First Past the Post System** – A majority system in which the candidate who gets the maximum votes is declared winner. **Ideology Oriented Party** – A party in which decisions are based on ideological principles. **Interest Oriented Party** – A party in which decisions are based on the basis of particular interest like promotion of caste, religion, rule, etc.

### Know the Personalities **C. Rajagopalachari:**

He was among one of the popular leaders of Swatantra Party. This party was formed after the Nagpur Resolution of Congress. He was also the first Governor-General of free India. **Acharya Narendra Dev:** He was the founder member of Socialist Party. **A. K. Gopalan:** He was a popular leader of The Communist Party of India. Prior to that, he was an active member of Congress Party in Kerala. **Shyama Prasad Mukherjee:** He founded the Bharatiya Jana Sangh.

**Important Dates** **1. 1885** Congress Party was founded **2. 1920** Communist Party was founded **3. 1929** National Revolutionary Party (later renamed as International Revolutionary Party) was founded **4. 1934** A group of young Congress leaders formed Congress Socialist Party as a faction of Congress Party. **5. 1948** The Socialist Party became independent from Congress **6. 1949** Completion of Constitution of India **7. 1950** Adoption of Constitution of India, Setting up of Election Commission of India **8. 1950 – 1958** Sukumar Sen served as the first Election Commissioner of India **9. 1951** Bharatiya Jana Sangh was founded **10. 1952** First General Elections were held **11. 1957** Communist Party of India defeated Congress in Kerala **12. 1958** Communist government in Kerala dismissed by Central government of Congress under Article 356 of the Constitution of India **13. 1959** Swatantra Party was founded **14. 2004** Electronic Voting Machines were used for elections in entire country

## Chapter 4 Politics Of Planned Development

### Topic-1 Five Year Plans and the Developments

#### Planning and Development

• The development of Orissa (now Odisha) through the rich iron resources was not greeted openly by the tribals in the state. They feared loss of their employment as

well as lodgings. Therefore, the ideas of development have always witnessed conflicts.

• At the time of independence, the leaders consulted with public opinion, opposition and political judgment to select an appropriate economic model for the country.

• The developmental areas focused immediately upon independence included poverty removal, redistribution of wealth, growth of agriculture and social upliftment.

• The Planning Commission of India was setup on the model of Bombay Plan.

• **Early Stages of Planning** A model of Five Year Plans was adopted by the Planning Commission of India. The budget was divided into Centre and State. Both Centre and State budgets were sub-categorised as Plan Budget (which involved expenses in accordance with the implementation of the five year plan) and Non-plan Budget (which involved expenses for the routine affairs and development of the country / state on an annual basis). The Five Year Plans enable the government to focus on long-term goals and objectives in the interest of the country.

• **First Five Year Plan** The areas of focus were removal of poverty, agriculture, investment in dams, irrigation facilities, redistribution of land, land reforms, etc.

• **Second Five Year Plan** The primary area of focus was industrialisation. Criticised for creating wealth in urban areas at the cost of industrialisation of rural areas.

• **Third Five Year Plan** The guidelines were highly influenced by those of the Second Five Year Plan. Criticised for being urban centric.

#### Indian Economy

• J. C. Kumarappa, an economist, supported the plan of industrialisation of rural areas to escape the vicious circle of poverty. Chaudhary Charan Singh, a leader of Congress, supported the view that plans must be agrarian centric.

• The mixed economy model emerged in India where the most beneficial mix of the factors of socialist and capitalist economies was instituted.

• However, more issues were under the control of public sector.

• There were import restrictions of goods that were being manufactured in India discouraging research and development in those goods.

• The general opinion was that the State existed for helping the private sector to generate profits and ventured only in those areas where there was no interest shown by the private sector.

• The land reforms failed in principal across the country due to emergence of inefficiency, political influence and corruption in the society.

• The dams of Bhakhra-Nangal and Hirakud are the gift of this era of Five Year Plans.

• The initiation of steel plants, oil refineries, defense production and infrastructure also took place during this era.

### Topic-2 Green Revolution

#### Situation that led to Green Revolution

• The phase of 1965-1967 was a hard hit for the Indian economy.

• The agricultural production was already worse during early 1960s.

• The hit of severe droughts and famines from 1965-1967 across the country worsened the situation.

• In the places with famine, the prices of food grains were sky-rocketed.

• The government had been following a policy of no trade of food grains across states during that period. As a

result, the condition in drought and famine hit areas worsened.

### • **Green Revolution**

- The government changed its policy for growth of the agricultural sector in the country.
- The past policy of giving support to areas and farmers was stopped.
- In the revised policy, the focus was put on providing resources to financially strong farmers and areas having irrigation facilities so that the agricultural production can increase at a rapid pace.
- For this, high-yielding varieties of seeds, synthetic fertilizers, improved pesticides and better irrigation facilities were provided at subsidised prices.
- The farmers were guaranteed that unsold produce will be purchased by the government.
- The revolution although benefitted rich peasants and landholders, yet it resulted in reorganisation of the poor peasants as well as an incentive for middle level peasants.

### • **White Revolution**

- Due to the White Revolution, there was a tremendous production of milk and milk products in states like Gujarat.
- The revolution was started by the Milkman of India, Varghese Kurien. He launched Gujarat Co-operative Milk and Marketing Federation Ltd., the parent company of Amul.

### • **Other developments**

- Various private banks were nationalised and schemes launched for upliftment of the poor sections of the population.
- Many restrictions were imposed on private industries during the later years of the 1960s.

**Important Terms Development** – A process that results in improvement in the living standard of the society as well as the progress of secondary sector of the economy. **Planning** – A regime designed to work in a manner so as to make optimally best use of the available resources in the most efficient manner and time constraints. **Planning Commission** – An organisation structured in 1950 and headed by the Prime Minister of India to formulate economic plans for the growth and development of Indian economy. The Commission has been renamed as NITI (National Institute for Transforming India) Aayog in 2014. **Plan Budget** – The amount available during the Five Year Plans for putting the plan into practice. **Bombay Plan** – A proposal submitted by leading industrialists in 1944 for planned development of the Indian economy. **Socialist Economy** – An economic setup in which the upliftment of society as a whole is focused in comparison to upliftment of the private sector. **Capitalist Economy** – An economic setup in which the upliftment of private sector is focused in comparison to upliftment of the society as a whole. **Mixed Economy** – An economic setup in which both private sector and public Sector co-exist and work on overall growth and development of the economy.

**Know the Personalities** Kakkadan Nandanath Raj (K. N. Raj) drafted the First Five Year Plan. Pt. Jawahar Lal Nehru presented the First Five Year Plan. P. C. Mahalanobis headed the team constituting the Second Five Year Plan. Varghese Kurien launched the White Revolution and is popularly called “The Milkman of India”.

**Important Dates** 1. 1950 Setting up of Planning Commission of India 2. 1951-1956 First Five Year Plan 3. 1956-1961 Second Five Year Plan 4. 1961-1966 Third Five Year Plan 5. 1965-1967 Various famines and droughts across India 6. 1966 Launch of the Green Revolution 7. 1969-1974 Fourth Five Year Plan 8. 1970 Launch of the Operation Flood 9. 1974-1979 Fifth Five Year Plan 10. 1980-1985 Sixth Five Year Plan 11. 1985-

1990 Seventh Five Year Plan 12. 1992-1997 Eighth Five Year Plan 13. 1997-2002 Ninth Five Year Plan 14. 2002-2007 Tenth Five Year Plan 15. 2007-2012 Eleventh Five Year Plan 16. 2012-2017 Twelfth Five Year Plan

## Chapter 5 India's External Relations

### Topic-1 Nehru's Foreign policy

#### • **World post the World War II**

- The reconstruction of the world economies was taking place.
- A model of an international body was being developed.
- More countries were getting independence from colonial rule.
- The new countries were facing the challenge of maintaining democracy as well as social welfare.

#### • **Independent India**

- India started participating in global affairs as an independent nation.
- India developed an aim to respect the sovereignty of other countries and try to work out a situation to maintain security in a peaceful manner. This was reflected in Article 51 (Directive Principles of State Policy) of our Indian Constitution.

#### • **India's Foreign Policy of Non-Alignment**

- Post World War II, many countries supported the foreign policies of stronger countries which were extending them financial and technical aid. There emerged various military camps in which most part of the world got divided into – the Western camp under the dominance of USA along with other Western countries and the Eastern camp under the dominance of USSR.

- India chose not to join any of these blocs and Jawaharlal Nehru came up with the concept of Non-Alignment to ensure independence, sovereignty and security of the country along with her economic development.

- Non-Alignment Movement led to reduction in global tension being caused due to the Cold War between the two blocs. Pakistan was influenced by USA's line of thought and joined the Western camp.

- There had been a subtle tension between India and USA initially as the NAM pursued by India was not liked by USA. The 1950s also witnessed the distress of USA over India's closeness with USSR.

- Nehru played a vital role in organising and conducting the Bandung Conference. The conference held in 1955 brought the newly independent Asian and African countries closer.

- The relations of India with other Asian countries were strengthened with Asian Relations Meet, Indonesia's Freedom Struggle, and decolonisation process.

- The Bandung Conference laid foundation for Non-Alignment Movement established in 1961 with Nehru as the co-founder. Its first Summit was held in Belgrade in September 1961.

### Topic-2 The Wars with the Neighbours

#### • **India and Tibet**

- Tibet was invaded by China in 1950.
- With Tibetan population claiming independence and India at that time being on friendly terms with China, tried to convince Chinese leaders to recognise independence of Tibet.
- Chinese Premier Zhou Enlai visited India with Tibetan spiritual leader Dalai Lama. Dalai Lama informed Nehru about the pathetic conditions of Tibetan at the hands of

China.

- Tibet started armed protest against China in 1958 and suppressing steps were taken by China to curb this.
- Seeing the grieving situation, Dalai Lama crossed over to India and sought political asylum in India which was granted to him.
- China took this as support of Tibet uprising supported by India and the relationships between the two countries started becoming sour. **6**

#### • India and China

- Initially, India and China were on friendly terms.
- India also recognised the communist government established in China immediately after the Chinese Revolution of 1949.
- Both the countries also signed Panchsheel Agreement on April 29, 1954 for peaceful co-existence on five guiding principles of peace. As a result of this, there were frequent visits of Indian and Chinese leaders to each other's countries.
- The tension in this peaceful relationship started with invasion of Tibet by China. This removed a historical buffer between the two countries.
- After seizing Tibet, China claimed Aksai Chin (part of Ladakh region) and NEFA (region of Arunachal Pradesh) to be a part of Chinese territory. China captured the Aksai Chin region and built road network over there.
- The matter could not be resolved in a peaceful manner despite discussions and deliberations among the leaders of the two countries and finally led to war in 1962.
- India had to seek military assistance from USA and UK. USSR remained neutral.
- With the war of 1962, India got alerted about the similar situation that may arise in the North-East.

#### • India and Pakistan

• **The War of 1965** 1. The first open war between the two countries broke in 1965 over Kashmir. 2. Both the countries claimed the occupancy of Kashmir as a part of their territory. 3 The war came to an end with an intervention of the United Nations. Both the countries were made to sign the Tashkent Agreement in 1966. 4. However, the war worsened the economic situation of India.

• **The War of 1971** 1. India's foreign policy of non-alignment to the military camps had made the intention of our leaders clear that they want India to develop as a regional power herself. 2. There was an uprising in East Pakistan for a separate independent government. To curb the movement, their leader Sheikh Mujib was arrested by Pakistan army and atrocities were levied on the revolutionaries. 3. India faced the problem of refugees who migrated from East Pakistan to the neighbouring regions in India. 4. The revolutionaries demanded for an independent country named Bangladesh and were supported by India in the venture. 5. Pakistan lost the war and Bangladesh emerged as an independent nation on March 26, 1971. 6. The tension between India and Pakistan increased as it was seen by Pakistan as promoting civil war in their country and partition of the country. 7. Both India and Pakistan signed a peace agreement, popularly called, The Shimla Agreement on July 3, 1972.

• **The War of 1999** 1. This war is also called the Kargil War. 2. The Pakistan forces under the guise of Mujahideens, crossed the Line of Control (LoC) between India and Pakistan in the regions of Dras, Kaksar, Batalik and Mashkoh. The Indian forces fought with the Pakistan forces and recovered the lost points from Pakistan. 3. The war extended from May to July 1999. 4. The entire world had its eyes on the war

because of the fact that both the countries had developed nuclear technology recently at that time.

### Topic-3 Recent developments in World Politics

#### • Nuclear Policy of India

- India's developed self-sufficiency in nuclear technology.
- Nehru was against the use of nuclear weapons. As an opposition to Nuclear Non-Proliferation Treaty (NPT) initiated the Nuclear Disarmament Movement.
- The stand of India has always been to use nuclear energy for peaceful purposes.
- The nuclear test by India was criticised in many parts of the country as well as across the world. The main reason within the country was that there was a worldwide inflation on account of Arab – Israel war and performing nuclear test in times of inflation pressurised the Indian economy.

**Important Terms** **Non-alignment** – A policy under which neither of the military blocs created during World War II were joined by a country. **Foreign Policy** – An interaction between the domestic aspects of the country and foreign issues that pertain to the country. **Panchsheel** – An agreement on five (Panch) principles that were devised for peaceful (Sheel) co-existence signed between India and China. **Bandung Conference** – A conference held in Bandung, Indonesia between Asian and African countries to set up Non-Alignment Movement (NAM). **North-Eastern Frontier Agency** – The name given to the region of Arunachal Pradesh as a political division during British Rule and after independence of India till 1972, when it became the union territory of Arunachal Pradesh (and later as state of Arunachal Pradesh in 1987).

**Know the Personalities** Pt. Jawaharlal Nehru is coined as 'The Chief Architect of India's Foreign Policy' due to his contributions for NAM.

**Important Dates** **1. 1947** Asian Relations Conference was convened by India **2. 1954** Panchsheel Agreement was signed with China on April 24 **3. 1955** Bandung Conference was held **4. 1961** Non-Alignment Movement (NAM) was set up. **5. 1962** Sino-Indian War **6. 1965** Indo-Pak War **7. 1971** Indo-Pak War **8. 1971** 20 years Treaty of Peace and Friendship was signed between India and Russia **9. 1972** Shimla Agreement was signed with Pakistan on July 3 **10. 1999** War between armies of India and Pakistan at Kargil

## Chapter 6 Challenges To The Congress System

### Topic-1 Political Succession after Nehru

#### • The decade of 1960s

- Referred to as the 'dangerous decade' in Indian politics.
- Reasons for this being no solutions found for poverty, inequality, regionalism, communalism, etc.
- Disintegration of country and disintegration of democracy were looking as the likely events.
- Political instability arose after demise of Jawaharlal Nehru with two questions in place: 1. 'Who after Nehru?' 2. 'What after Nehru?'

#### • Lal Bahadur Shastri

- Lal Bahadur Shastri was unopposed and unanimously chosen as the leader of Congress Parliamentary Party and became the second Prime Minister of India (1964-1966).
- Prior to becoming Prime Minister, he was a cabinet member for three years and belonged to the state of Uttar Pradesh.
- India faced the after effects of the economic crisis that



arose during the Sino-Indian War of 1962.

- India defeated Pakistan under his courageous leadership in 1965. **Topic - 1** Political Succession after Nehru.... **P. 163** **Topic - 2** General Elections of 1967 and Split in Congress.... **P. 165** **Topic - 3** Major Opposition Parties and Congress Coalition.... **P. 170**
- His tenure also witnessed many droughts and famines making the lives of the farmers miserable. This led to the criticism of his slogan 'Jai Jawan Jai Kisan' as the problems of the farmers remained unsolved.
- He passed away while his visit to Tashkent (erstwhile USSR) to sign peace treaty with Pakistan.
- **Indira Gandhi**
- The untimely demise of Shastri created leadership crisis again in Congress.
- This time the leadership was contested by two – Indira Gandhi and Morarji Desai.
- After holding elections by secret ballot, Indira Gandhi was elected as the next leader of Congress party.
- This transition is referred to as 'sign of maturity of India's democracy'.

## Topic-2 General Elections of 1967 and Split in Congress

- These elections were historic in the sense that for the first time, Congress had started losing popularity.
- **Reasons for decrease in popularity**
- Two Prime Ministers had died in quick succession.
- The new Prime Minister Indira Gandhi was called 'Goongi Gudiya' and was called as puppet of the powerful leaders.
- The period witnessed successive famines and droughts, decrease of agricultural produce, decrease in industrial production, food shortage, depletion of foreign exchange reserves, costly imports, increased military expenditure (due to recent wars with China and Pakistan).
- Indira Government devalued INR from USD 1 = INR 5 to USD 1 = INR 7 to meet the economic crisis of 1967. However, this resulted in large scale inflation in the domestic market.
- This resulted in setting up of non-Congressism.
- **General Elections of 1967**
- These were the first elections contested by Congress without Nehru.
- The results of the elections were coined as 'political earthquake' as the popularity of Congress had reduced by a large scale. Though, Congress managed to secure majority at Centre but with lowest number of seats in comparison to all three previous general elections.
- At state level, Congress lost majority to local parties and non-Congress parties which was a blow. Strong Congress leaders like S. K. Patil, K. Kamraj, K. B. Sahay, etc. were defeated in their constituencies.
- These elections gave rise to a new form of government – the coalition government. **1.** In Bihar, it was named as Samyukt Vidhayak Dal – formed by coalition of Samyukt Socialist Party, Bhartiya Kranti Dal, Jana Sangh and Praja Socialist Party. **2.** In Punjab, it was named as Popular United Front – formed by coalition of Shiromani Akali Dal and Sant Fateh Singh group.
- These elections also witnessed defections by Congress legislators mainly in Uttar Pradesh, Madhya Pradesh and Haryana. Some of the defections were so frequent that these were nicknamed as "Aaya Ram, Gaya Ram", after the defections shown by Gaya Lal from Haryana.
- **Split in Congress**
- With the rise of Syndicate in Congress, there was a wall between Indira Gandhi and the Syndicate.
- Some of the eminent members of the Congress

Syndicate were N. Sanjeeva Reddy, S. K. Patil, K. Kamraj and A. Ghosh. The Syndicate wanted Indira to work as their puppet.

- Challenge faced by Indira was to restore the popularity of Congress as well as suppress the Syndicate within the party.
- Indira introduced reforms like **1.** Ten Point Programme **2.** Nationalisation of General Insurance **3.** Nationalisation of banks **4.** Ceiling on land holdings **5.** Ceiling on urban property **6.** Land reforms **7.** Public Distribution System for food grains
- The Syndicate proposed the name of N. Sanjeeva Reddy for Presidential elections in 1969. In contrast, Indira proposed the name of V.V. Giri for the same position. As a result, the differences within Congress became public.
- With the defeat of Reddy in Presidential elections, the Congress Party was formally split into: **1.** Congress (O) / Congress (Organisation) / Old Congress led by the Syndicate. **2.** Congress (R) / Congress (Requisitionists) / New Congress led by Indira Gandhi.

## Topic-3 Major Opposition Parties and Congress Coalition

- **General Elections of 1971**
- With the split in Congress, Indira Gandhi recommended dissolution of Lok Sabha in December 1970.
- As a result, the next general elections were held in February 1971.
- The majority of the voters supported Congress (O), considering them to be the advocates of the original Congress ideologies.
- The opposition parties like Swantra Party, Jana Sangh, CPI, SSP, PSP, etc. united and formed what was called a Grand Alliance with the sole motto of "Indira Hatao".
- As a retaliation to this motto, Indira gave the slogan of "Garibi Hatao" to attract the voters belonging to the poor class, peasants, labourers, landless farmers and other weaker sections of the society.
- Indira Hatao promoted a negative spirit while Garibi Hatao was positive in nature.
- The opposition had no political programme and no positive slogan except the motto of "Indira Hatao". This tarnished their image to some extent.
- **Result** – The result of the elections came as a surprise. Indira led Congress (R) won 352 seats while Congress (O) could bag a meager figure of 16 seats only. The number of votes in favour of Congress (R) were 44% while those in favour of Congress (O) were 11%.
- With this victory, Congress (R) proclaimed to be the original Congress party.
- The Grand Alliance of the opposition proved to be a disastrous failure.

**Important Terms Syndicate** – A group of popular and influential leaders within the Congress. **Non-Congressism** – Anti-Congress front formed by the non-Congress parties having different ideologies and political programmes. **Grand Alliance** – A united coalition front formed by major political parties like Swatantra Party, Bharatiya Jana Sangh, SSP, PSP, etc. against the Congress. **Congress (O)** – Congress (Organisation) or Old Congress formed by the Congress Syndicate upon split of the Congress. **Congress (R)** – Congress (Requisitionists) or New Congress led by Indira Gandhi. **Political Earthquake** – The results of general elections of 1967 which shook firm grounding of the Congress party both at national as well as state level. **Ten-Point Programme** – The political programme adopted by Indira Gandhi after the defeat in elections of 1967. This programme covered land reforms, banking reforms, etc. **Devaluation** – The government technique to control the inflation in the

economy by reducing the exchange rate of domestic country with respect to the foreign exchange.

**Know the Personalities** V. V. Giri was the fourth President of India. Jawaharlal Nehru was the first Prime Minister of India. Lal Bahadur Shastri was the second Prime Minister of India. Indira Gandhi was the third Prime Minister of India. S. Nijalingappa was a senior member of the Constituent Assembly. K. Kamraj was a famous freedom fighter and a Congress leader. C. Natarajan Annadurai was a journalist, a politician and founder of DMK party. He became the Chief Minister of Madras (now Tamil Nadu). Ram Manohar Lohia was one of the founders of the Congress Socialist Party. Karpoori Thakur was a famous freedom fighter and a Socialist leader.

**Important Dates** 1. 1949 DMK was formed. 2. 1964 Nehru passed away on May 27. 3. 1967 Fourth General Elections were held. 4. 1969-1974 V. V. Giri appointed as the President of India. 5. 1971 Fifth General Elections were held.

## Chapter 7 Crisis Of The Democratic Order

### Topic-1 National Emergency

- **Context of Emergency**
- **Judiciary and the Government**
- The relationship between the judiciary and government was tensed.
- Many initiatives of Central Government were declared as violation of the Constitution by the Supreme Court.
- **Economic Situation**
- Even after the slogan of 'Garibi Hatao' adopted by the Congress, the economic situation of the country worsened during 1972-1973.
- Post Indo-Pak War of 1971, USA government put an end to all the foreign aid being extended to India by USA.
- With global increase in prices of crude oil, there was an unexpected inflation in the country.
- The situation further worsened due to increase in price of food grains due to failure of monsoons for two consecutive years.
- There was unprecedented fall in industrial productivity and increase in unemployment during the period.
- **Student movements**
- The students led protest movements against the increasing prices of food grains in the then Congress ruled states of Gujarat and Bihar. The movements started in January 1974 in Gujarat and in March 1974 in Bihar.
- Jayaprakash Narayan was later invited to join the movements who united such student movements across the country.
- **Declaration of Emergency**
- The immediate cause of declaring Emergency was the verdict passed by Allahabad High Court. In a petition filed by Raj Narain, who was a rival to Indira Gandhi in Lok Sabha elections in 1971, the Court had declared the victory of Indira Gandhi as invalid.
- Jayaprakash Narayan organised a nation wide Satyagraha forcing Indira Gandhi to resign on the basis of verdict of the Allahabad High Court.
- On June 24, 1975, a situation of National Emergency was declared and imposed on the country upon recommendation of Indira Gandhi under Article 352 of the Constitution.

### Consequences of Emergency

- The nationwide bandhs and protests got terminated and banned.
- Many leaders of the opposition and other prominent persons were arrested on the ground of preventive detention.
- Press censorship was imposed.
- National organisations like Rashtriya Swayamsevak Sangh (RSS) and Jamait-e-Islami were banned.
- Fundamental rights of the citizens were suspended till the continuance of National Emergency.
- The Constitution was amended to include that elections of President of India, Vice President of India and Prime Minister of India could not be challenged in any court of law including the Supreme Court of India.
- The 42nd Amendment to the Constitution, controversially also called 'The Constitution of Indira', snatched many powers from the judiciary and gave overruling rights to the government alongwith curtailing the field of Fundamental Rights of the citizens.
- **Controversies related to the National Emergency**
- Due to different view points of people about the imposition of Emergency, it is the most debatable and controversial topic of Indian politics.
- The Emergency gave dictatorial powers to a democratically elected government.
- The Shah Commission declared Emergency as a period of crossing the bounds by the government.
- **Necessity of National Emergency**
- The Communist Party of India supported that due to international interference by using students as weapons for destroying democracy of the country, such bans on protest to some extent was necessary.
- The government held the view that the elected government must be allowed to run the country.
- The opposition and public at large held the view that people dissatisfied have the right to protest against the policies of the government.
- To make Emergency a success, there were cases reported of mass arrests of political workers, compulsory sterilisation for population control, window dressing for relocation of poor, custodial deaths, tortures, etc.

### Topic-2 Politics after the National Emergency

- With the lifting up of Emergency, General Elections were held in January 1977.
- The result of the elections was a complete turnaround as Congress lost majority first time since independence.
- **Janata Government**
- The Janata Party came to power.
- Facing competition from Jagjivan Ram and Chaudhary Charan Singh, Morarji Desai was elected as the next Prime Minister of the country.
- Desai did not complete full term of prime ministership and was succeeded by Chaudhary Charan Singh.
- Due to lack of a common programme and a constant direction, inability to change Congress policies and splits within the party led to mid-term elections in 1980.

**Important Terms** **Marxist-Leninist** – A strong group in Eastern India, particularly in West Bengal, which was influenced by the ideas of Marx and Lenin and used arms to overthrow the current political as well as the capitalist system in the society. **Satyagraha** – A method of peaceful demonstration asking for true and lawful rights from the ruling government. This method was originally used by Mahatma Gandhi during India's struggle for Independence from British rule. **Garibi Hatao** – The slogan adopted by Congress led by Indira Gandhi. It meant 'Remove Poverty'. **Twenty-Point Programme** – A programme laid down by Congress under the

leadership of Indira Gandhi to restore economic and political peace. It primarily focused on improved land reforms, education policy, discontinuance of bonded labour, removal of poverty, etc. **Emergency** – A constitutional situation in which the democratic rights of the citizens get suspended and the entire power remains in the hands of the Central Government. **Preventive Detention** – A policy during Emergency under which certain people were arrested on the grounds of expected offence that may be committed by them. **5Press censorship** – A policy during Emergency under which every newspaper had to take prior approval of the Central Government before publishing any news / article etc.

**Know the Personalities** **Indira Gandhi**: The Prime Minister of India at the time of declaration of National Emergency. **Jayaprakash Narayan**: A leader of the opposition who combined the dispersed students, movements and led national level Satyagraha for resignation of Indira Gandhi.

**Important Dates** **1. 1971** Congress returned to power under Indira Gandhi **2. 1973** Increase in prices by more than 20%. **3. 1974** Increase in prices by more than 30%. **4. 1974** Student Movements against rising prices started in Bihar and Gujarat. **5. 1975** Gujarat Assembly Elections held, Indira Gandhi's election to Lok Sabha held invalid by the Allahabad High Court. **6. 1975** National Emergency declared in the country. **7. 1977** Lok Sabha Elections held with Janata Party emerging victorious.

## Chapter 8 Rise Of Popular Movements

### Revision Notes

#### • Emergence of Popular Movements

- Diverse social groups started raising voice with their specific agenda in 1970s.
- These movements are classified as: **1. Party-based movements** – The movements which are supported by one or more political parties but the participants of the movement are not formally involved in the election process of the country. Examples: Trade Union Movements in Mumbai, Kanpur, Kolkata, Pune, etc. **2. Non-party based movements** – The movements in which there are huge number of people who lose faith in the policies of the democratic setup and are not supported by any political party. Examples: Chipko Movement, Narmada Bachao Andolan, etc.
- **Chipko Movement**
  - The people hugged trees to prevent them from being cut and fell.
  - The movement started in Uttarakhand when the forest department did not give permission to local villagers to cut trees to make agricultural tools but later allotted the same piece of land to a sports goods manufacturing company to cut trees and make sports equipment.
  - The villagers protested against the department by hugging trees and making it impossible for the sports goods manufacturer to cut trees without hurting or killing the villagers.
  - It became a world famous environmental movement of India.
- **Dalit Panthers**
  - A militant organisation of Dalit youths.
  - Their objectives were to fight against caste based inequalities, implementation of reservation policy, implementation of policies of social justice, etc.
  - Activities concentrated in the state of Maharashtra.
  - Due to militant atrocities of the Dalit Panthers, acts of the nature of those performed by Dalit Panthers were

banned by formulating law in 1989.

#### Bharatiya Kisan Union

- Demanded higher price floors, guaranteed supply of electricity, farmer pensions, abolition of agrarian restrictions, etc.
- Methods used for protest included demonstrations, sit-ins, rallies, jail bhara andolans, etc.
- Used panchayats to connect and ensure participation of everyone.
- It operated as a pressure group and kept away from active politics of the country.
- **Anti-Arrack Movement**
  - Started with women's demand to ban sale of liquor in Andhra Pradesh.
  - It was also a movement against the liquor mafias.
  - The movement grew manifold with highlighting ill-effects of liquor like domestic violence, dowry, sexual violence, etc.
- **Narmada Bachao Andolan**
  - The Andolan started as a protest by the locals against the proposed multipurpose dam called Narmada Sagar Project.
  - The said project was expected to deliver good quality and quantity of drinking water as well as irrigation water, increase in agricultural productivity and generate electricity to develop self-sufficiency in the states of Gujarat, Madhya Pradesh and Maharashtra.
  - The project was opposed on the grounds of social costs vs economic costs, sacrifice by rural people for benefit of urban people and other such factors.
  - The Andolan initially demanded with rehabilitation of the locals who will suffer but later shifted the demand to total surrender of the project.
  - As a result, the Union Government was forced to pass the National Rehabilitation Policy, 2003.
- **Teachings from the Popular Movements**
  - Help in understanding the nature of politics in democracy.
  - Help in rectifying the functioning of party politics.
  - Help in bringing to front some groups/issues which have not yet been completely addressed or neglected.
  - Help in reducing social conflicts.
  - Help in broadening the participation of the masses in the democratic setup of the country.
  - Help in understanding the shortcomings of the present democratic setup which does not have a proper channel for voicing concerns.
  - Help in understanding the fact that, although successful, yet these protests, sit-ins, demonstrations and rallies effect the routine functioning of the democracy as well as cause discomfort to many thereby reducing the support for the movement.

**Important Terms** **Party-based movements** – The movements which are supported by one or more political parties but the participants of the movement are not formally involved in the election process of the country. **Non-party based movements** – The movements in which there are huge number of people who lose faith in the policies of the democratic setup and are not supported by any political party. **Chipko** – To hug or to embrace someone or something. **Dalit Panthers** – The organisation of Dalit youth based in Maharashtra, formed against the cause of social inequality and social injustice but involved in militant activities. **MKSS** – Mazdoor Kisan Shakti Sangathan, the organisation of farmers demanding for records of famines, labour, relief work, etc.

**Important Dates** **1. 1972** Formation of Dalit Panthers in Maharashtra **2. 1973** Initiation of Chipko Movement **3. 1978** Formation of Bharatiya Kisan Union in Madhya Pradesh **4. 1987** Construction started for Sardar Sarovar Project **5. 1987** Formation of Mazdoor



Kisan Shakti Sangathan **6. 1990** Initiation of Movement for Right to Information **7. 1991** Successful waging of legal battle by National Fish Workers' Forum with the Central Government **8. 2005** Right to Information Act - passed by the Parliament (on June 15) and enforced (on October 12)

## Chapter 9 Regional Aspirations

### Topic-1 Rise of Regional Parties

- In 1980s, many regional parties gained importance.
- Dravidian movement that started before independence, initially created disturbance for the government after independence.
- Kashmir had always been a tension for the government not only due to misunderstandings between Government of India and Government of Pakistan but also due to political aspirations of the persons living in the state of Jammu and Kashmir.
- North-East has never fully been convinced for merging with India. There have been various movements including those in Nagaland, Mizoram and Assam for independence.
- In Tamil Nadu, there was a massive protest when Hindi was proposed to be the National language of the country. **Topic - 1 Rise of Regional Parties.... P. 194 Topic - 2 Punjab.... P. 196 Topic - 3 Kashmir.... P. 198 Topic - 4 North-East.... P. 201**

### Topic-2 Punjab

- The Akali Dal gained power in 1967 and 1977. They formed coalition government at both instances.
- In 1970s, a group of Akalis started demanding a separate state for Sikhs.
- In 1973, the Akali Dal in its Anandpur Sahib conference passed Anandpur Sahib Resolution to define the relationship between the centre and the state in a new format.
- In 1980, the Akali Dal government was dismissed.
- After the dismissal, the Akali Dal movement turned into insurgency and the resolutions passed in Akali Dal conferences was declared controversial.
- Soon the movement became armed and established its headquarters at Golden Temple in Amritsar.
- In 1984, Operation Blue Star was launched by army and Government of India to evacuate the holy shrine from the militants. However it also damaged some parts of the holy shrine which hurt the sentiments of the Sikh community.
- With the assassination of then the Prime Minister Mrs. Indira Gandhi on October 31, 1984 by her two Sikh bodyguards, the anti-Sikh riots started across the major portion of the country.
- With Rajiv Gandhi becoming the next Prime Minister of India, a Punjab treaty was signed between Rajiv Gandhi and Harchand Singh Longowal, then the President of Akali Dal, the first normal elections post the era of militants were conducted in 1997, and the alliance of Akali Dal and BJP was formed.

### Topic-3 Kashmir

- Jammu and Kashmir is divided into three political regions – Jammu, Kashmir and Ladakh.
- The Kashmir issue is an international dispute between India and Pakistan as well as the fight for Kashmiriyat, the identity of Kashmiris.
- Prior to independence, Jammu and Kashmir was a princely state with Hari Singh as the King. He did not want to merge with India as well as Pakistan and wanted

to be declared as an independent nation.

- In 1947, infiltrators were sent by Pakistan to capture the state. Hari Singh asked for help from Indian military.
- India extended its full support to drive away insurgents after Hari Singh had signed 'Instrument of Accession'.
- Sheikh Abdullah became the first Prime Minister of Kashmir as Indian government could not participate in the affairs of the state.
- Some part of Kashmir has been occupied by Pakistan and Indian government has named it as 'Pakistan occupied Kashmir' (PoK). Pakistan calls this part as 'Azad Kashmir'.
- The Article 370 of the Indian Constitution gives a special status to the state of Jammu and Kashmir and exempted from various laws passed by Parliament of India.
- The Congress government tried to control the politics of Jammu and Kashmir from 1953 to 1974.
- In 1974, Sheikh Abdullah of National Conference was appointed as Chief Minister of J&K.
- In 1982, Farooq Abdullah became Chief Minister after the death of his father Sheikh Abdullah.
- In 1987, he again formed government with coalition of Congress. These elections are considered as rigged and not reflecting the true choice of people.
- In 1989, the insurgents and militants became highly active with moral, financial as well as ammunition support from Pakistan which continued till 2001.
- In 2002, the National Conference got down and 'Peoples Democratic Party' (PDP) led by Mufti Mohammad Sayeed took over with coalition of Congress.
- In 2008, the National Conference won and Omar Abdullah, son of Farooq Abdullah, was sworn in as the Chief Minister of the state.
- In 2016, after the death of Mufti Mohammad Sayeed, his daughter Mehbooba Mufti took over as the Chief Minister with coalition with BJP.

### Topic-4 North-East

- In 1980s, the seven sisters faced lot of regional disturbances.
- Due to its complexities in social status and backwardness in comparison to rest of India, there have been lots of demands for independence of these states from India.
- First retaliation was faced in Assam by non-Assamese when Assamese language was declared as the official language of the state.
- There have always been demands for independence from insurgent groups like Bodos, Karbis, Dimasas etc.
- The Mizo Hills area was declared as a part of Assam after independence. However, the natives of the area held that they were never under the British rule and accordingly they are not a part of the Indian union.
- As a result, they have always been demanding for independence from India.
- In 1986, Rajiv Gandhi and Laldenga signed a treaty under which Mizoram was declared a separate state of the Indian union.
- Angami Zaphu Phizo, referred to as 'Father of the Nagas', led Nagas till Nagaland was declared as a separate state of the Indian union in 1962.

**Important Terms Khalistan** – A separate Sikh state being demanded by the Sikh community with their own independent government. **Operation Blue Star** – An army code name given to the actions of the army against Sikh militants who had made headquarters in Golden Temple in June 1984. **Instrument of Accession** – A treaty signed between Government of India and the Maharaja of Kashmir at

the time of accession of the state into the Indian Union.

**Insurgency** – An act directed against national government within the country and supported by the local people. **Seven Sisters** – The name given to the seven North-Eastern states of Arunachal Pradesh, Assam, Meghalaya, Manipur, Mizoram, Nagaland and Tripura. **Mizo National Front (MNF)** – A group formed in 1959, by Laldenga demanding for a separate state for Mizos.

## Know the Personalities **Indira**

**Gandhi** – The Prime Minister of India who lead Operation Blue Star. **Rajiv Gandhi** – The Prime Minister of India who signed treaty to establish peace in Mizoram. **Laldenga** – The founder and leader of the Mizo National Front. **Angami Zaphu Phizo** – The leader of Nagas demanding for independence from India. **Hari Singh** – The Maharaja of Kashmir who signed 'Instrument of Accession' of Kashmir with Indian Union. **Harchand Singh Longowal** – The President of Akali Dal who got Chandigarh transferred back to Punjab. **Sheikh Abdullah** – The founder of National Conference and first Chief Minister of Jammu and Kashmir. **Mehbooba Mufti** – The first women Chief Minister of Jammu and Kashmir.

**Important Dates** 1. 1947 Infiltrators sent by Pakistan to capture Kashmir. 2. 1961 Goa, Daman and Diu declared as separate Union Territories on 19<sup>th</sup> December 3. 1966 The Mizo National Front started armed campaign. 4. 1974 Sheikh Abdullah appointed as the Chief Minister of J&K. 5. 1975 Complete integration of Sikkim with India. 6. 1979 The All Assam Students' Union (AASU) started an anti-foreigner campaign. 7. 1979-1985 Assam Movement. 8. 1984 Operation Blue Star carried out by the Government of India in June. 9. 1984 Anti-Sikh riots in November. 10. 1985 Assam Gana Parishad gained power. 11. 2005 Dr. Manmohan Singh, then the Prime Minister of India apologised to the nation for anti-Sikh violence.

## Chapter 10 Recent Developments In Indian Politics

### Topic-1 Political Developments

- **The main developments that took place in late 1980s, in the Indian politics are:**
- End of Congress system
- New economic reforms
- Mandal recommendations
- Era of coalition governments
- Ayodhya dispute and Babri Masjid demolition
- Assassination of Rajiv Gandhi
- In 1989 elections, Congress was defeated and many small regional parties and Congress factions emerged without any single party being in majority.
- Alliance governments emerged where the government was formed by coalition of some small regional parties with an outside support from a big political party. The big political party only extended support but did not participate in the process of forming government.
- The period also saw the strengthening of OBCs and parties allied to them.
- The Mandal Commission had recommended reservation for OBCs in jobs of Central Government. National Front Government (Prime Minister: V. P. Singh) implemented these recommendations. This was met by nationwide anti-Mandal protest.
- The period is also characterised by upsurge of parties who promoted similar reservations in education and all

employment opportunities along with share in the power as well.

- The period saw the emergence of Dalit political organisations like Backward and Minority Communities' Employees Federation (BAMCEF), Dalit Shoshit Samaj Sangharsh Samiti, Bahujan Samaj Party, etc.
- The period also saw the strengthening role of religion in politics.
- Bharatiya Janata Party(BJP) started promoting the concept of 'Hindutva' and started mobilising Hindus.
- BJP believed that a strong nation can be built only if it has one common strong united culture and religion.
- **Shah Bano Case (1985)** – In this case, when alimony was awarded by the Supreme Court to a Muslim divorced women, the ruling was reversed by then Congress Government under pressure of Islamic authorities and leaders discriminating Muslim women. This was taken up by BJP as Congress being a pro-man pro-Muslim party.
- **Ayodhya Issue (since 1940s)** – The dispute at Ayodhya has been for many decades. The mosque doors were locked in 1940s but when these were reopened, both Hindus and Muslims started mobilising their resources over there. Soon, it became a communal tension between the two groups.
- **Demolition of Babri Masjid (1992)** – The Babri Masjid was demolished on December 6, 1992 and construction of Ram Mandir was started by various organisations offering voluntary services or karseva for construction of the temple. Post the demolition of the mosque, there were Hindu-Muslim clashes across the country.
- **Anti-Muslim riots in Gujarat (2002)** – At Godhara Railway Station, a bogey full of karsevaks was set on fire suspected to be by Muslims. This resulted in anti-Muslim riots in the state of Gujarat.

### Topic-2 Coalition Governments

- **Coalition Government** – A system in which many political parties co-operate to form a united stand. In this stand, no party is said to have dominance over the other party. A confidence vote or no-confidence motion is passed in case the government needs to prove majority or the opposition needs to show that the coalition is no longer in majority.
- There have been many coalition governments in India. Some of the initial ones are formed by Janata Party, National Front and United Front. However, none of these coalition governments lasted for complete tenure of five years.
- The first coalition government to complete full tenure of 5 years was that of National Democratic Alliance (NDA) with Atal Bihari Vajpayee as the Prime Minister.
- This was followed by two successive tenures of coalition governments formed by United Progressive Alliance (UPA) with Dr. Manmohan Singh as the Prime Minister.
- In the present tenure, BJP contested elections as NDA in the elections, BJP emerged as the party with complete majority in the Lok Sabha and Narendra Modi became the Prime Minister.

**Important Terms** **OBC** – Stands for Other Backward Classes. It covers classes other than SC and ST who suffer from educational, economic and social backwardness. **BAMCEF** – Stands for Backward and Minority Classes' Employees Federation. It was formed in 1978 as a mark of Dalit uprising. **Karseva** – The name given to the voluntary service rendered by the devotees for building Ram Mandir in Ayodhya. **Mandal Commission** – The Commission that was set up to identify the level of educational, economic and social backwardness of

various backward classes and recommend ways for upliftment of these backward classes.

## Know the Personalities **Kanshi Ram**

– Founder of Bahujan Samaj Party **Mayawati** –  
Successor of Kanshi Ram **V. P. Singh** – Founder of  
Janata Dal

## Important Dates **1. 1977-1979** Government

of Janata Party **2. 1978** Setting up of Mandal  
Commission **3. 1978** Formation of BAMCEF **4. 1980**  
Recommendations received from Mandal Commission  
**5. 1984** Assassination of Indira Gandhi **6. 1984**  
Formation of Bahujan Samaj Party (BSP) by Kanshi Ram  
**7. 1989** Beginning of Coalition Governments **8. 1989-**  
**1990** V.P. Singh appointed as Prime Minister of India  
(Coalition: National Front supported by Left Front and  
BJP) from 21-12-1989 to 10-11-1990 **9. 1990-1991**  
Chandra Shekhar appointed as Prime Minister of India  
(Coalition: A Section of National Front supported by  
Congress) from 10-11-1990 to 21-6-1991 **10. 1991**  
Announcement of New Economic Reforms **11. 1991**  
Assassination of Rajiv Gandhi **12. 1991-1996** P. V.  
Narsimha Rao appointed as Prime Minister of India

(Coalition: Congress supported by AIADMK) from 21-6-  
1991 to 16-5-1996 **13. 1992** Demolition of Babri Masjid  
**14. 1996** Atal Bihari Vajpayee appointed as Prime  
Minister of India (Majority - BJP) from 16-5-1996 to 1-6-  
1996 **15. 1996-1997** H. D. Deve Gowda appointed as  
Prime Minister of India (Coalition: United Front  
supported by Congress) from 1-6-1996 to 21-4-1997 **16.**  
**1997-1998** I. K. Gujral appointed as Prime Minister of  
India (Coalition: United Front supported by Congress)  
from 21-4-1997 to 19-3-1998 **17. 1998-2004** Atal Bihari  
Vajpayee appointed as Prime Minister of India  
(Coalition: National Democratic Alliance led by BJP)  
from 19-3-1998 to 22-5-2004 **18. 2001** Kanshi Ram  
appointed Mayawati as his successor in BSP **19. 2002**  
Anti-Muslim riots at Godhra Railway Station (Gujarat)  
**20. 2004-2014** Dr. Manmohan Singh appointed as  
Prime Minister of India (Coalition: United Progressive  
Alliance led by Congress) from 22-5-2004 to 25-5-2014  
**21. 2014 onwards** Narendra Modi appointed as Prime  
Minister of India (Majority - BJP) from 26-5-2014 till  
date



# NCERT Class 9

## Economics

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 The Story Of Village Palampur

#### Chapter Summary Topicwise

##### Topic-1 Organization of Production

##### Quick Review

**Overview** The purpose of the story of village Palampur is to introduce some basic concepts relating to production and this we do through a story of a hypothetical village called Palampur. Palampur is well-connected with neighbouring villages and towns. This village has about 450 families belonging to several different castes.

- In villages across India, farming is the main production activity. The other production activities, referred to as non-farming activities include small manufacturing, transport, shop-keeping, etc.

##### Organisation of Production

The aim of production is to produce the goods and services that we want. There are four requirements for production of goods and services.

The first requirement is **land**, and other natural resources such as water, forests, minerals.

The second requirement is **labour**, i.e. people who will do the work. Some production activities require highly educated workers to perform the necessary tasks. Other activities require workers who can do manual work. Each worker is providing the labour necessary for production.

The third requirement is **physical capital**, i.e. the variety of inputs required at every stage during production. What are the items that come under physical capital?

(a) *Tools, machines, buildings*: Tools and machines range from very simple tools such as a farmer's plough to sophisticated machines such as generators, turbines, computers, etc. Tools, machines, buildings can be used in production over many years, and are called **fixed capital**.

(b) *Raw materials and money in hand*: Production requires a variety of raw materials such as the yarn used by the weaver and the clay used by the potter. Also, some money is always required during production to make payments and buy other necessary items. Raw materials and money in hand are called **working capital**. Unlike tools, machines and buildings, these are used up in production.

There is a fourth requirement too. You will need knowledge and enterprise to be able to put together land, labour and physical capital and produce an output either to use yourself or to sell in the market. This these days is called human capital. We shall learn more about **human capital** in the next chapter.

*Every production is organised by combining land, labour, physical capital and human capital, which are known as **factors of production**.*

**Important Terms Labour**: It refers to the people who are available for work. **Capital**: It is the form of money or assets, taken as a sign of the financial strength of an individual and assumed to be available for development or investment.

**Physical capital**: The variety of inputs required during the process of production. **Fixed capital**: The part of physical capital which can be used in process of production over many years and cannot be altered in short periods. **Working capital**: Raw materials and money in hand are known as working capital. **Human capital**: It is the stock of skills and productive knowledge embodied in them. Physical capital cannot deliver goods in the absence of adequate trained human power.

##### Topic-2 Farming in Palampur

##### Quick Review

##### Farming in Palampur:

- **Land is fixed** >75 per cent of the people of Palampur are dependent on farming for their livelihood. >The well-being of these people is closely related to production on the farms. >But one of the main problems of the Palampur village is that the land area under cultivation is practically fixed. Since 1960 in Palampur, there has been no expansion in land area under cultivation. >By then, some of the wastelands in the village had been converted to cultivable land. >The standard unit of measuring land is hectare.

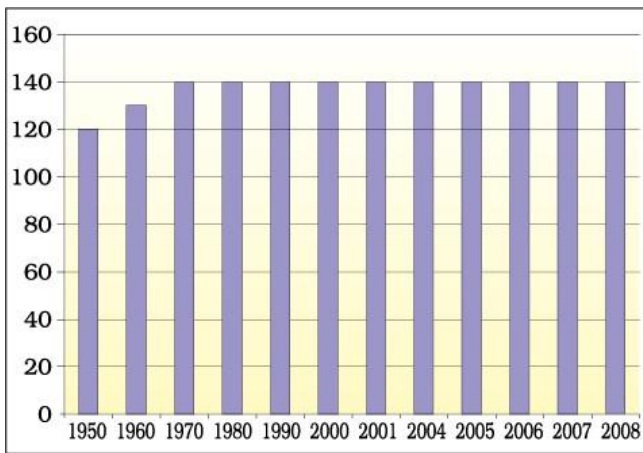
##### • Is there a way one can grow more from the same land?

To grow more than one crop on a piece of land during the year is known as multiple cropping. It is the most common way of increasing production on a given piece of land. The main reason why farmers are able to grow different crops in a year is due to the well-developed system of irrigation and other infrastructure requirements like electricity, well, distribution channels etc

Not all villages in India have such high levels of irrigation. Apart from the riverine plains, coastal regions in our country are well-irrigated. In contrast, plateau regions such as the Deccan plateau have low levels of irrigation. Of the total cultivated area in the country a little less than 40 per cent is irrigated even today. In the remaining areas, farming is largely dependent on rainfall.

**Table 1.1:** Cultivated area over the years

**Source:** Economic Survey 2010-2011



Is it important to increase the area under irrigation? Why?

Yield is measured as crop produced on a given piece of land during a single season. Till the mid-1960s, the seeds used in cultivation were traditional ones with relatively low yields. Traditional seeds needed less irrigation. Farmers used cow-dung and other natural manure as fertilizers. All these were readily available with the farmers who did not have to buy them.

The Green Revolution in the late 1960s introduced the Indian farmer to cultivation of wheat and rice using high yielding varieties (HYVs) of seeds. Compared to the traditional seeds, the HYV seeds promised to produce much greater amounts of grain on a single plant. As a result, the same piece of land would now produce far larger quantities of foodgrains than was possible earlier. HYV seeds, however, needed plenty of water and also chemical fertilizers and pesticides to produce best results.

Higher yields were possible only from a combination of HYV seeds, irrigation, chemical fertilisers, pesticides etc. Farmers of Punjab, Haryana and Western Uttar Pradesh were the first to try out the modern farming method in India. The farmers in these regions set up tubewells for irrigation, and made use of HYV seeds, chemical fertilizers and pesticides in farming. Some of them bought farm machinery like tractors and threshers, which made ploughing and harvesting faster. They were rewarded with high yields of wheat.

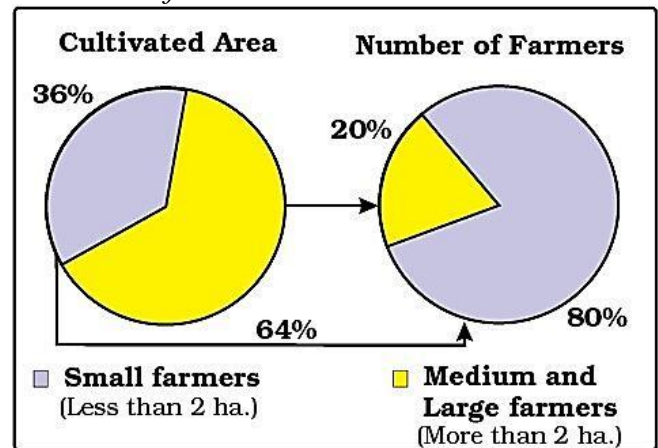
**Table 1.2:** Production of pulses and wheat (Tonnes)

	Production of Pulses	Production of Wheat
1965 - 66	10	10
1970 - 71	12	24
1980 - 81	11	36
1990 - 91	14	55
2000 - 01	11	70
2010 - 11	18	86

**Will the land sustain?** > Land being a natural resource, it is necessary to be very careful in its use. > The modern farming methods have overused the natural resource base. > In many areas, the Green Revolution is associated with the loss of soil fertility due to increased use of chemical fertilizers. > Continuous use of groundwater for tube well irrigation has reduced the water table below the ground. > Chemical fertilizers provide minerals which dissolve in water and are immediately available to plants. But these may not be retained in the soil for long. They may escape from the soil and pollute groundwater, rivers and lakes. >

Chemical fertilizers can also kill bacteria and other microorganisms in the soil. > Therefore, soil becomes less fertile and degraded by overusing of chemical fertilizers. > The consumption of chemical fertilizers in Punjab is highest in the country.

**• How is land distributed among the farmers of Palampur?** > All the people engaged in agriculture do not have sufficient land for cultivation in Palampur. > The large number of small plots scattered around the village are cultivated by the small farmers. > On the other hand, in Palampur, there are 60 families of medium and large farmers who cultivate more than 2 hectares of land. A few of the large farmers have land extending over 10 hectares or more. *Graph 1.1: Distribution of Cultivated Area and Farmers*



**• Who will provide the labour?** > Small farmers along with their families cultivate their own fields. Thus, they provide the labour required for farming themselves. >

Medium and large farmers hire farm labourers to work on their fields. > Farm labourers come either from landless families or families cultivating small plots of land. > A farm labourer might be employed on a daily basis, or for one particular farm activity like harvesting, or for the entire year. > The minimum wages for a farm labourer set by the government is Rs 115 (April, 2011) per day.

**• The capital needed in farming:** > Most of the small farmers have to borrow money to arrange for the capital. They borrow from large farmers or the village moneylenders or the traders. > Since the rate of interest on such loans is very high, they are put to great distress to repay the loan. > The medium and large farmers have their own savings from farming. They are thus able to arrange for the capital needed.

**• Sale of surplus farm products:** > The farmers retain a part of the wheat for the family's consumption and sell the surplus one. > The traders at the market buy the crop and sell it further to shopkeepers in the towns and cities. > The large farmers are able to sell the entire produced crop at the market and earn good income. > They can save most of their money in the bank account and later use the savings for lending to small farmers. They can even buy tools, machines, cattle or trucks for improving agriculture.

**Important Terms Agriculture:** The art of cultivating the land. **Irrigation:** Supply of water to agriculture from canals, wells and tube wells artificially or manually. **Soil fertility:** The ability level of soil to grow and support plant life.

### Topic-3 Non-Farming Activities in Palampur

#### Quick Review

#### Non-farming Activities in Palampur:

- Only 25 per cent of the people working in Palampur

are engaged in activities other than agriculture.

- Dairy, small-scale manufacturing, shop keeping and transportation are different types of non-farming activities practiced in the village.
- As more villages get connected to towns and cities through roads, transport and telephone, it is possible that the opportunities for non-farming activities in the village would increase in the coming years.

**Important Terms Manufacturing:** The process through which raw materials are transformed into a final product.

**Yield:** Agricultural yield is measured as a crop produced on a given piece of land during single season. **Non-farming activity:** It refers to the activities in a village other than farming. This includes manufacturing and transportation.

## 6. The capital needed in farming

You have already seen that the modern farming methods require a great deal of capital, so that the farmer now needs more money than before.

1. Most small farmers have to borrow money to arrange for the capital. They borrow from large farmers or the village moneylenders or the traders who supply various inputs for cultivation. The rate of interest on such loans is very high. They are put to great distress to repay the loan.

2. In contrast to the small farmers, the medium and large farmers have their own savings from farming. They are thus able to arrange for the capital needed. How do these farmers have their own savings? You shall find the answer in the next section.

### Summary

Farming is the main production activity in the village. Over the years there have been many important changes in the way farming is practiced. These have allowed the farmers to produce more crops from the same amount of land. This is an important achievement, since land is fixed and scarce. But in raising production a great deal of pressure has been put on land and other natural resources.

The new ways of farming need less land, but much more of capital. The medium and large farmers are able to use their own savings from production to arrange for capital during the next season. On the other hand, the small farmers who constitute about 80 per cent of total farmers in India, find it difficult to obtain capital. Because of the small size of their plots, their production is not enough. The lack of surplus means that they are unable to obtain capital from their own savings, and have to borrow. Besides the debt, many of the small farmers have to do additional work as farm labourers to feed themselves and their families.

Labour being the most abundant factor of production, it would be ideal if new ways of farming used much more labour. Unfortunately, such a thing has not happened. The use of labour on farms is limited. The labour, looking for opportunities is thus migrating to neighbouring villages, towns and cities. Some labour has entered the non-farm sector in the village.

At present, the non-farm sector in the village is not very large. Out of every 100 workers in the rural areas in India, only 24 are engaged in non-farm activities.

Though there is a variety of non-farm activities in the villages (we have only seen a few examples), the number of people employed in each is quite small.

In the future, one would like to see more non-farm production activities in the village. Unlike farming, non-farm activities require little land. People with some amount of capital can set up non-farm activities. How does one obtain this capital? One can either use his own savings, but more often has to take a loan. It is important

that loan be available at low rate of interest so that even people without savings can start some non-farm activity. Another thing which is essential for expansion of non-farm activities is to have markets where the goods and services produced can be sold. In Palampur, we saw the neighbouring villages, towns and cities provide the markets for milk, jaggery, wheat, etc. As more villages get connected to towns and cities through good roads, transport and telephone, it is possible that the opportunities for non-farm activities in the village would increase in the coming years.

## Chapter 2 People As Resource

### Topic-1 Economic Activities done by Men and Women and Quality of Human Resource

The chapter 'People as Resource' is an effort to explain population as an asset for the economy rather than a liability. Population becomes human capital when there is investment made in the form of education, training and medical care. In fact, human capital is the stock of skill and productive knowledge embodied in them.

'People as Resource' is a way of referring to a country's working people in terms of their existing productive skills and abilities. Looking at the population from this productive aspect emphasises its ability to contribute to the creation of the Gross National Product. Like other resources population also is a resource — a 'human resource'. This is the positive side of a large population that is often overlooked when we look only at the negative side, considering only the problems of providing the population with food, education and access to health facilities. When the existing 'human resource' is further developed by becoming more educated and healthy, we call it 'human capital formation' that adds to the productive power of the country just like 'physical capital formation'. Investment in human capital (through education, training, medical care) yields a return just like investment in physical capital. This can be seen directly in the form of higher incomes earned because of higher productivity of the more educated or the better trained persons, as well as the higher productivity of healthier people.

India's Green Revolution is a dramatic example of how the input of greater knowledge in the form of improved production technologies can rapidly increase the productivity of scarce land resources. India's IT revolution is a striking instance of how the importance of human capital has come to acquire a higher position than that of material, plant and machinery.

Not only do the more educated and the healthier people gain through higher incomes, society also gains in other indirect ways because the advantages of a more educated or a healthier population spreads to those also who themselves were not directly educated or given health care. In fact, human capital is in one way superior to other resources like land and physical capital: human resource can make use of land and capital. Land and capital cannot become useful on its own

For many decades in India, a large population has been considered a liability rather than an asset. But a large population need not be a liability. It can be turned into a productive asset by investment in human capital (for example, by spending resources on education and health for all, training of industrial and agricultural workers in the use of modern technology, useful



scientific researches and so on).

Investment in human resource (via education and medical care) can give high rates of return in the future. This investment on people is the same as investment in land and capital. One invests in shares and bonds expecting higher return in the future.

A child, too, with investments made on her education and health, can yield a high return in the future in the form of higher earnings and greater contribution to society. Educated parents are found to invest more heavily on the education of their child. This is because they have realised the importance of education for themselves. They are also conscious of proper nutrition and hygiene. They accordingly look after their children's needs for education at school and good health. A virtuous cycle is thus created in this case. In contrast, a vicious cycle may be created by disadvantaged parents who, themselves uneducated and lacking in hygiene, keep their children in a similarly disadvantaged state.

Countries like Japan have invested in human resource. They did not have any natural resource. These countries are developed/rich countries. They import the natural resource needed in their country. How did they become rich/developed? They have invested on people especially in the field of education and health. These people have made efficient use of other resource like land and capital. Efficiency and the technology evolved by people have made these countries rich/developed.

### Economic Activities done by Men and Women

- Various activities have been classified into three main sectors: primary, secondary and tertiary.
- Primary sector includes agriculture, forestry, animal husbandry, fishing, poultry farming, mining, and quarrying.
- Manufacturing is included in the secondary sector.
- Trade, transport, communication, banking, education, health, tourism, services, insurance, etc., are included in the tertiary sector. The activities in this sector result in the production of goods and services.
- Since these activities add value to the national income, they are called economic activities.
- Economic activities have two parts – market activities and nonmarket activities.
- Market activities involve remuneration to anyone who performs, *i.e.*, activity performed for pay or profit. These include production of goods or services including government service.
- Non-market activities are the production for self-consumption. These can be consumption and processing of primary products and own account production of fixed assets.
- A division of labour exists between men and women in the family because of the historical and cultural reasons.
- The household work done by women is not recognized in the national income.
- Among the organized sector, teaching and medicine attract the women the most. Some women have entered administrative and other services including job that needs high levels of scientific and technological competence.

### Quality of Population

- The quality of population depends upon the literacy rate, health of a person indicated by life expectancy and skill formation acquired by the people of the country. The quality of the population ultimately decides the growth rate of the country. Illiterate and unhealthy

population are a liability for the economy. Literate and healthy population are an asset.

### Education

- Education is an important input for the growth of a person.
- It opens new horizons for the person.
- Provides new aspiration.
- Develops values of life.
- Contributes towards the growth of the society.
- Enhances the national income and cultural richness.
- Increases the efficiency of governance.
- The policies that can add to the literate population of India:
  - There is a provision made for providing universal access, retention and quality in elementary education along with a special emphasis on girls.
  - Schools like Navodaya Vidyalaya have been established in each district.
  - Vocational streams have been developed to equip large number of high school students with occupations related to knowledge and skills.
  - “Sarva Siksha Abhiyan” is a significant step towards providing elementary education to all children in the age group of six to fourteen years by 2010.
  - The bridge courses and back-to-school camps have been initiated to increase the enrolment in elementary education.
  - Mid-day meal scheme has been implemented to encourage attendance and retention of children and improve their nutritional status.
  - The eleventh plan endeavoured to increase the enrolment in higher education of the 18 to 23 years age group to 15% by 2011–2012 and to 21% by twelfth plan.
  - The strategy focuses on increasing access, quality, adoption of states: specific curriculum modification, vocational and networking on the use of information technology.
  - The plan also focuses on distant education, convergence of formal, non-formal, distant and IT educational institutions.

### Health

- The health of a person helps him to realize his potential and provides the ability to fight illness.
- Improvement in the health status of the population has been the priority of the country.
- Our national policy aims at improving the accessibility of health care, family welfare and nutritional service, with a special focus on the under-privileged segment of the population.
- Increase in longevity of life is an indicator of the good quality of life marked by self-confidence.
- Reduction in infant mortality involves the protection of children from infection, ensuring nutrition along with mother and child care.
- There are only 381 medical colleges in the country and 301 dental colleges. Just four states *i.e.*, Andhra Pradesh, Karnataka, Maharashtra and Tamil Nadu have maximum number of colleges.

### Topic-2 Unemployment as a Form of Non-utilization of Human Resource

#### Unemployment

Unemployment is said to exist when people who are *willing to work* at the *going wages* but *cannot* find jobs. The workforce population includes people from 15 years to 59 years.

In case of India we have unemployment in rural and urban areas. However, the nature of unemployment differs in rural and urban areas. In case of rural areas,

there is seasonal and disguised unemployment. Urban areas have mostly educated unemployment. Seasonal unemployment happens when people are not able to find jobs during some months of the year. People dependant upon agriculture usually face such kind of problem. There are certain busy seasons when sowing, harvesting, weeding and threshing is done. Certain months do not provide much work to the people dependant on agriculture.

In case of disguised unemployment people appear to be employed. They have agricultural plot where they find work. This usually happens among family members engaged in agricultural activity. The work requires the service of five people but engages eight people. Three people are extra. These three people also work in the same plot as the others. The contribution made by the three extra people does not add to the contribution made by the five people. If three people are removed the productivity of the field will not decline. The field requires the service of five people and the three extra people are disguised unemployed.

In case of urban areas educated unemployment has become a common phenomenon. Many youth with matriculation, graduation and post graduation degrees are not able to find job. A study showed that unemployment of graduate and post-graduate has increased faster than among matriculates. A paradoxical manpower situation is witnessed as surplus of manpower in certain categories coexist with shortage of manpower in others. There is unemployment among technically qualified person on one hand, while there is a dearth of technical skills required for economic growth.

Unemployment leads to wastage of manpower resource. People who are an asset for the economy turn into a liability. There is a feeling of hopelessness and despair among the youth. People do not have enough money to support their family. Inability of educated people who are willing to work to find gainful employment implies a great social waste.

Unemployment tends to increase economic overload. The dependence of the unemployed on the working population increases. The quality of life of an individual as well as of society is adversely affected. When a family has to live on a bare subsistence level there is a general decline in its health status and rising withdrawal from the school system.

Hence, unemployment has detrimental impact on the overall growth of an economy. Increase in unemployment is an indicator of a depressed economy. It also wastes the resource, which could have been gainfully employed. If people cannot be used as a resource they naturally appear as a liability to the economy.

In case of India, statistically, the unemployment rate is low. A large number of people represented with low income and productivity are counted as employed. They appear to work throughout the year but in terms of their potential and income, it is not adequate for them. The work that they are pursuing seems forced upon them. They may therefore want other work of their choice. Poor people cannot afford to sit idle. They tend to engage in any activity irrespective of its earning potential. Their earning keeps them on a bare subsistence level.

Moreover, the employment structure is characterised by self-employment in the primary sector. The whole family contributes in the field even though not everybody is really needed. So there is disguised

unemployment in the agriculture sector. But the entire family shares what has been produced. This concept of sharing of work in the field and the produce raised reduces the hardship of unemployment in the rural sector. But this does not reduce the poverty of the family, gradually surplus labour from every household tends to migrate from the village in search of jobs. Let us discuss about the employment scenario in the three sectors mentioned earlier. Agriculture, is the most labour absorbing sector of the economy. In recent years, there has been a decline in the dependence of population on agriculture partly because of disguised unemployment discussed earlier. Some of the surplus labour in agriculture has moved to either the secondary or the tertiary sector. In the secondary sector, small scale manufacturing is the most labour-absorbing. In case of the tertiary sector, various new services are now appearing like biotechnology, information technology and so on.

### Summary

You have seen how inputs like education and health helped in making people an asset for the economy. The chapter also discusses about the economic activities undertaken in the three sectors of the economy. We also study about the problem associated with unemployment.

**Important Terms GNP (Gross National Product):** It is the sum total of all the final goods and services produced by the normal residents of a country during an accounting year.

**Human capital formation:** When the existing human resource is further developed by becoming more educated and healthy, human capital formation takes place. It adds to the productive power of the country, just like physical capital formation.

**Literacy rate:** Percentage of people above a certain age, who can, along with understanding, both read and write short simple statements in everyday life. **Infrastructure:** The physical framework required to provide different types of services.

**Infant Mortality rate:** The number of death of infants under one year of age occurring among the live births per thousand of the births in a year. **Death Rate:** The number of deaths in a year under one year of age occurring among the live births per thousand of live population.

**Life expectancy:** The average period that a person may expect to live. **Literate:** A person of seven years of age or above who is able to read and write along with a certain level of understanding.

**Unemployment:** Inability to get work in spite of proper age, ability and interest. **Disguised unemployment:** The state in which a person is willing and able to work at prevailing wages, but his productivity is zero. **Seasonal unemployment:** This type of unemployment occurs when people are not able to find employment for some part of the year. It is typically found in the agricultural sector due to its seasonal nature.

## Chapter 3 Poverty As A Challenge

### Overview

This chapter deals with one of the most difficult challenges faced by independent India—poverty. After discussing this multi-dimensional problem through examples, the chapter discusses the way poverty is seen in social sciences. Poverty trends in India and the world are illustrated through the concept of the poverty line. Causes of poverty as well as anti-poverty measures taken by the government are also discussed. The chapter ends with broadening the official concept of poverty into human poverty. In fact, every fourth person in India is poor. This means, roughly 300 million (or 30 crore) people in India live in poverty. This also means that India has the largest single concentration of the poor in the world. This illustrates the seriousness of

the challenge

### Poverty is multidimensional

Poverty is multidimensional. Poverty means hunger and lack of shelter. It also is a situation in which parents are not able to send their children to school or a situation where sick people cannot afford treatment. Poverty also means lack of clean water and sanitation facilities. It also means lack of a regular job at a minimum decent level. Above all it means living with a sense of helplessness. Poor people are in a situation in which they are ill-treated at almost every place, in farms, factories, government offices, hospitals, railway stations etc. Obviously, nobody would like to live in poverty.

### Poverty as seen by social scientists

Since poverty has many facets, social scientists look at it through a variety of indicators. Usually the indicators used relate to the levels of income and consumption. But now poverty is looked through other social indicators like illiteracy level, lack of general resistance due to malnutrition, lack of access to healthcare, lack of job opportunities, lack of access to safe drinking water, sanitation etc. Analysis of poverty based on social exclusion and vulnerability is now becoming very common.

### Social exclusion

According to this concept, poverty must be seen in terms of the poor having to live only in a poor surrounding with other poor people, excluded from enjoying social equality of better-off people in better surroundings. Social exclusion can be both a cause as well as a consequence of poverty in the usual sense. Broadly, it is a process through which individuals or groups are excluded from facilities, benefits and opportunities that others (their “betters”) enjoy. A typical example is the working of the caste system in India in which people belonging to certain castes are excluded from equal opportunities. Social exclusion thus may lead to, but can cause more damage than, having a very low income.

### Vulnerability

Vulnerability to poverty is a measure, which describes the greater probability of certain communities (say, members of a backward caste) or individuals (such as a widow or a physically handicapped person) of becoming, or remaining, poor in the coming years. Vulnerability is determined by the options available to different communities for finding an alternative living in terms of assets, education, health and job opportunities. Further, it is analysed on the basis of the greater risks these groups face at the time of natural disasters (earthquakes, tsunami), terrorism etc. Additional analysis is made of their social and economic ability to handle these risks. In fact, vulnerability describes the greater probability of being more adversely affected than other people when bad time comes for everybody, whether a flood or an earthquake or simply a fall in the availability of jobs

### Poverty Line

At the centre of the discussion on poverty is usually the concept of the “poverty line”. A common method used to measure poverty is based on the income or consumption levels. A person is considered poor if his or her income or consumption level falls below a given “minimum level” necessary to fulfill basic needs. What is necessary to satisfy basic needs is different at different times and in different countries. Therefore, poverty line may vary with time and place. Each country uses an imaginary line that is considered appropriate for its

existing level of development and its accepted minimum social norms. For example, a person not having a car in the United States may be considered poor. In India, owning of a car is still considered a luxury.

While determining the poverty line in India, a minimum level of food requirement, clothing, footwear, fuel and light, educational and medical requirement etc. are determined for subsistence. These physical quantities are multiplied by their prices in rupees. The present formula for food requirement while estimating the poverty line is based on the desired calorie requirement. Food items such as cereals, pulses, vegetable, milk, oil, sugar etc. together provide these needed calories. The calorie needs vary depending on age, sex and the type of work that a person does. The accepted average calorie requirement in India is 2400 calories per person per day in rural areas and 2100 calories per person per day in urban areas. Since people living in rural areas engage themselves in more physical work, calorie requirements in rural areas are considered to be higher than urban areas. The monetary expenditure per capita needed for buying these calorie requirements in terms of food grains etc. is revised periodically taking into consideration the rise in prices.

On the basis of these calculations, for the year 2009-10, the poverty line for a person was fixed at Rs 673 per month for the rural areas and Rs 860 for the urban areas. Despite less calorie requirement, the higher amount for urban areas has been fixed because of high prices of many essential products in urban centres. In this way in the year 2009-10, a family of five members living in rural areas and earning less than about Rs 3,165 per month will be below the poverty line. A similar family in the urban areas would need a minimum of Rs 4,300 per month to meet their basic requirements. The poverty line is estimated periodically (normally every five years) by conducting sample surveys. These surveys are carried out by the National Sample Survey Organisation (NSSO). However, for making comparisons between developing countries, many international organisations like the World Bank use a uniform standard for the poverty line: minimum availability of the equivalent of \$1 per person per day.

### Poverty Estimates

It is clear from the Table 3.1 that there is substantial decline in poverty ratios in India from about 55 per cent in 1973 to 30 per cent in 2009-10. The proportion of people below poverty line further came down to about 26 per cent in 2000. If the trend continues, people below poverty line may come down to less than 20 per cent in the next few years. Although the percentage of people living under poverty declined in the earlier two decades (1973–1993), the number of poor remained stable around 320 million for a fairly long period. The latest estimates indicate a significant reduction in the number of poor to about 27% by 2004-05.

**Table 3.1:** Estimates of Poverty in India

Year	Poverty ratio (%)			Number of poor (in millions)		
	Rural	Urban	Combined	Rural	Urban	Combined
1973-74	56.4	49	55	261	60	321
1993-94	37.3	32.4	36	244	76	320
1999-00	27.1	23.6	26	193	67	260
2004-05	28.3	25.7	27	220	81	301
2009-10	34	27	30	2782	765	3547

**Source:** Economic Survey 2011–12, Ministry of Finance, Government of India.

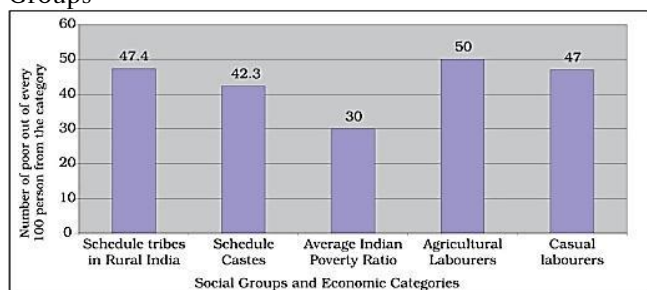
### Vulnerable Groups

The proportion of people below poverty line is also not same for all social groups and economic categories in India. Social groups which are most vulnerable to



poverty are scheduled caste and scheduled tribe households. Similarly, among the economic groups, the most vulnerable groups are the rural agricultural labour households and the urban casual labour households. The following Graph 3.1 shows the percentage of poor people in all these groups. Although the average for people below poverty line for all groups in India is 30, 48 out of 100 people belonging to scheduled tribes in rural areas are not able to meet their basic needs. Similarly, 47 per cent of casual workers in urban areas are below poverty line. About 50 per cent of landless agricultural workers and 43 per cent of scheduled castes are also poor. The double disadvantage, of being a landless casual wage labour household in the socially disadvantaged social groups of the scheduled caste or the scheduled tribe population highlights the seriousness of the problem. Some recent studies have shown that except for the scheduled tribe households, all the other three groups (i.e. scheduled castes, rural agricultural labourers and the urban casual labour households) have seen a decline in poverty in the 1990s.

**Graph 3.1:** Poverty in India 2000: Most Vulnerable Groups



### Inter-State Disparities

Poverty in India also has another aspect or dimension. The proportion of poor people is not the same in every state. Although state level poverty has witnessed a secular decline from the levels of early seventies, the success rate of reducing poverty varies from state to state. Recent estimates show that in 20 states and union territories, the poverty ratio is less than the national average. On the other hand, poverty is still a serious problem in Orissa, Bihar, Assam, Tripura and Uttar Pradesh. As the Graph 3.2 shows, Orissa and Bihar continue to be the two poorest states with poverty ratios of 47 and 43 per cent respectively. Along with rural poverty, urban poverty is also high in Orissa, Madhya Pradesh, Bihar and Uttar Pradesh.

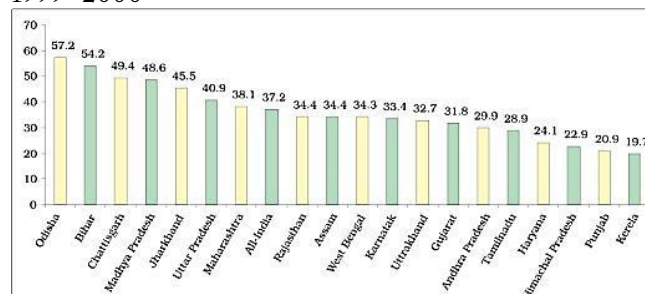
In comparison, there has been a significant decline in poverty in Kerala, Jammu and Kashmir, Andhra Pradesh, Tamil Nadu, Gujarat and West Bengal. States like Punjab and Haryana have traditionally succeeded in reducing poverty with the help of high agricultural growth rates. Kerala has focused more on human resource development. In West Bengal, land reform measures have helped in reducing poverty. In Andhra Pradesh and Tamil Nadu public distribution of food grains could have been responsible for the improvement.

### Global Poverty Scenario

The proportion of people in developing countries living in extreme economic poverty—defined by the World Bank as living on less than \$1.25 per day—has fallen from 43 per cent in 1990 to 22 per cent in 2008. Although there has been a substantial reduction in global poverty, it is marked with great regional differences. Poverty declined substantially in China and Southeast Asian countries as a result of rapid economic growth and massive investments in human resource

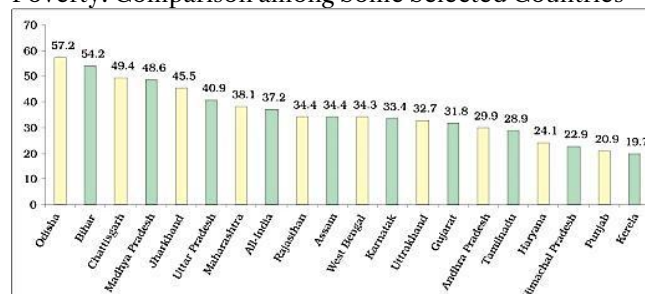
development. Number of poor in China has come down from 85 per cent in 1981 to 14 per cent in 2008. In the countries of South Asia (India, Pakistan, Sri Lanka, Nepal, Bangladesh, Bhutan) the decline has not been as rapid. Despite decline in the percentage of the poor, the number of poor has declined marginally from 61 per cent in 1981 to 36 per cent in 2008. Because of different poverty line definition, poverty in India is also shown higher than the national estimates.

**Graph 3.2:** Poverty Ratio in Selected Indian States, 1999–2000



**Source:** Economic Survey 2001–02, Ministry of Finance, Government of India

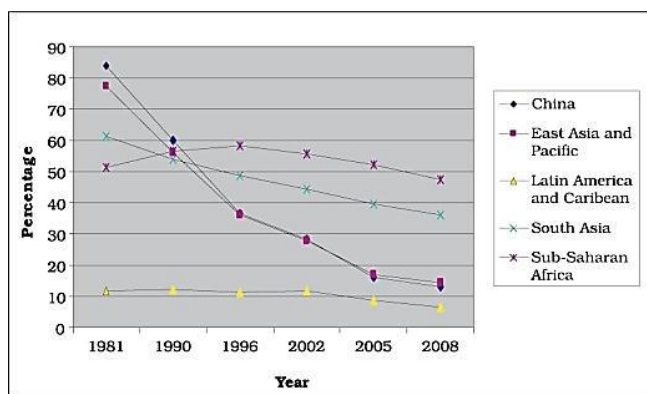
In Sub-Saharan Africa, poverty in fact rose from 51 per cent in 1981 to 47 per cent in 2008. In Latin America, the ratio of poverty remained the same. It has declined from 11% in 1981 to 6.4 per cent in 2008. Poverty has also resurfaced in some of the former socialist countries like Russia, where officially it was non-existent earlier. Table 3.2 shows the proportion of people living under poverty in different countries as defined by the international poverty line (means population below \$1 a day). The Millennium Development Goals of the United Nations calls for reducing the proportion of people living on less than \$1 a day to half the 1990 level by 2015.



Country	% of Population below \$1.25 a day
1. Nigeria	64
2. Bangladesh	50
3. India	42
4. Pakistan	23
5. China	16
6. Brazil	4
7. Indonesia	19
8. Sri Lanka	7

**Source:** Human Development Report 2011, UNDP

**Graph 3.3:** Share of people living on \$1.25 a day, 1980–2008



**Source:** World Development Indicators 2012, The World Bank.

**Graph 3.4:** Number of poor by region (\$ 1.25 per day) in millions

### Causes of Poverty

There were a number of causes for the widespread poverty in India. One historical reason is the low level of economic development under the British colonial administration. The policies of the colonial government ruined traditional handicrafts and discouraged development of industries like textiles. The low rate of growth persisted until the nineteen-eighties. This resulted in less job opportunities and low growth rate of incomes. This was accompanied by a high growth rate of population. The two combined to make the growth rate of per capita income very low.

The failure at both the fronts: promotion of economic growth and population control perpetuated the cycle of poverty.

With the spread of irrigation and the Green revolution, many job opportunities were created in the agriculture sector. But the effects were limited to some parts of India. The industries, both in the public and the private sector, did provide some jobs. But these were not enough to absorb all the job seekers. Unable to find proper jobs in cities, many people started working as rickshaw pullers, vendors, construction workers, domestic servants etc. With irregular small incomes, these people could not afford expensive housing. They started living in slums on the outskirts of the cities and the problems of poverty, largely a rural phenomenon also became the feature of the urban sector.

Another feature of high poverty rates has been the huge income inequalities. One of the major reasons for this is the unequal distribution of land and other resources.

Despite many policies, we have not been able to tackle the issue in a meaningful manner. Major policy initiatives like land reforms which aimed at redistribution of assets in rural areas have not been implemented properly and effectively by most of the state governments. Since lack of land resources has been one of the major causes of poverty in India, proper implementation of policy could have improved the life of millions of rural poor.

Many other socio-cultural and economic factors also are responsible for poverty. In order to fulfil social obligations and observe religious ceremonies, people in India, including the very poor, spend a lot of money. Small farmers need money to buy agricultural inputs like seeds, fertilizer, pesticides etc. Since poor people hardly have any savings, they borrow. Unable to repay because of poverty, they become victims of indebtedness. So the high level of indebtedness is both the cause and effect of poverty.

### Anti-Poverty Measures

Removal of poverty has been one of the major objectives of Indian developmental strategy. The current anti-poverty strategy of the government is based broadly on two planks (1) promotion of economic growth (2) targeted anti-poverty programmes.

Over a period of thirty years lasting up to the early eighties, there were little per capita income growth and not much reduction in poverty. Official poverty estimates which were about 45 per cent in the early 1950s remained the same even in the early eighties.

Since the eighties, India's economic growth has been one of the fastest in the world. The growth rate jumped from the average of about 3.5 per cent a year in the 1970s to about 6 per cent during the 1980s and 1990s.

The higher growth rates have helped significantly in the reduction of poverty. Therefore, it is becoming clear that there is a strong link between economic growth and poverty reduction.

Economic growth widens opportunities and provides the resources needed to invest in human development. This also encourages people to send their children, including the girl child, to schools in the hope of getting better economic returns from investing in education. However, the poor may not be able to take direct advantage from the opportunities created by economic growth. Moreover, growth in the agriculture sector is much below expectations. This has a direct bearing on poverty as a large number of poor people live in villages and are dependent on agriculture. In these circumstances, there is a clear need for targeted anti-poverty programmes. Although there are so many schemes which are formulated to affect poverty directly or indirectly, some of them are worth mentioning.

*National Rural Employment Guarantee Act (NREGA)* 2005 was passed in September 2005. The Act provides 100 days assured employment every year to every rural household in 200 districts. Later, the scheme will be extended to 600 districts. One third of the proposed jobs would be reserved for women. The central government will also establish National Employment Guarantee Funds. Similarly state governments will establish State Employment Guarantee Funds for implementation of the scheme.

Under the programme if an applicant is not provided employment within fifteen days s/he will be entitled to a daily unemployment allowance. Another important scheme has been the *National Food for Work Programme (NFWP)*, which was launched in 2004 in 150 most backward districts of the country. The programme is open to all rural poor who are in need of wage employment and desire to do manual unskilled work. It is implemented as a 100 per cent centrally sponsored scheme and foodgrains are provided free of cost to the states. Once the NREGA is in force, the NFWP will be subsumed within this programme.

*Prime Minister Rozgar Yozana (PMRY)* is another scheme which was started in 1993. The aim of the programme is to create self-employment opportunities for educated unemployed youth in rural areas and small towns. They are helped in setting up small business and industries. *Rural Employment Generation Programme (REGP)* was launched in 1995. The aim of the programme is to create self-employment opportunities in rural areas and small towns. A target for creating 25 lakh new jobs has been set for the programme under the Tenth Five Year plan. *Swarnajayanti Gram Swarozgar Yojana (SGSY)* was launched in 1999. The programme aims at bringing the assisted poor families above the poverty line by organising them into self help groups through a mix of bank credit and government subsidy.

Under the *Pradhan Mantri Gramodaya Yozana (PMGY)* launched in 2000, additional central assistance is given to states for basic services such as primary health, primary education, rural shelter, rural drinking water and rural electrification. Another important scheme is *Antyodaya Anna Yozana (AAY)* about which you will be reading more in the next chapter.

The results of these programmes have been mixed. One of the major reasons for less effectiveness is the lack of proper implementation and right targeting. Moreover, there has been a lot of overlapping of schemes. Despite good intentions, the benefits of these schemes are not fully reached to the deserving poor. Therefore, the major emphasis in recent years is on proper monitoring of all the poverty alleviation programmes.

### The Challenges Ahead

Poverty has certainly declined in India. But despite the progress, poverty reduction remains India's most compelling challenge. Wide disparities in poverty are visible between rural and urban areas and among different states. Certain social and economic groups are more vulnerable to poverty. Poverty reduction is expected to make better progress in the next ten to fifteen years. This would be possible mainly due to higher economic growth, increasing stress on universal free elementary education, declining population growth, increasing empowerment of the women and the economically weaker sections of society.

The official definition of poverty, however, captures only a limited part of what poverty really means to people. It is about a "minimum" subsistence level of living rather than a "reasonable" level of living. Many scholars advocate that we must broaden the concept into human poverty. A large number of people may have been able to feed themselves. But do they have education? Or shelter? Or health care? Or job security? Or self-confidence? Are they free from caste and gender discrimination? Is the practice of child labour still common? Worldwide experience shows that with development, the definition of what constitutes poverty also changes. Eradication of poverty is always a moving target. Hopefully we will be able to provide the minimum "necessary" in terms of only income to all people by the end of the next decade. But the target will move on for many of the bigger challenges that still remain: providing health care, education and job security for all, and achieving gender equality and dignity for the poor. These will be even bigger tasks.

### Summary

You have seen in this chapter that poverty has many dimensions. Normally, this is measured through the concept of "poverty line". Through this concept we analysed main global and national trends in poverty. But in recent years, analysis of poverty is becoming rich through a variety of new concepts like social exclusion. Similarly, the challenge is becoming bigger as scholars are broadening the concept into human poverty.

**Important Terms** **Poor:** A poor person is the one who is lacking sufficient money to live at a standard considered comfortable or normal in a society. Some of the examples of poor people are: daily wage workers at construction sites, child labourers in *dhabas*, rickshaw pullers, domestic servants, cobblers, beggars, etc. **Poverty:** Poverty is a state or condition in which a person or community lacks the financial resources and essentials to enjoy a minimum standard of life and well-being that's considered acceptable in society. **Indicators of poverty:** Nowadays, poverty is looked through other indicators like illiteracy level, lack of access to health care, lack of job opportunities, lack of access to safe drinking water, social exclusion sanitation, etc. All these can be termed as

indicators of poverty. **Social exclusion:** The concept of social exclusion states that poor people have to live in poor surroundings excluded from neighbourhoods of people who are better off. **Poverty line:** It is a measure based on levels of income and consumption by people to identify poor. The concept of poverty line is based on the fact that a person must have a minimum level of income and consumption to satisfy the basic needs of food, clothing, clean water, education and healthcare. **Vulnerability** is determined by the availability of options for employment, education and healthcare, etc. It is also determined by the ability of people to handle hard times and natural disasters like earthquakes, floods and tsunamis. Poor people are more vulnerable to poverty. **Inter-state disparities:** The proportion of poor people is not the same in every state. In 20 states and union territories, the poverty ratio is less than the national average. Odisha and Bihar are the poorest states of India with poverty ratios of 47% and 43% respectively. The lowest incidence of poverty is found in Jammu and Kashmir with poverty ratio of just 3.5 per cent.

## Chapter 4 Food Security In India

### Overview

Food security means availability, accessibility and affordability of food to all people at all times. The poor households are more vulnerable to food insecurity whenever there is a problem of production or distribution of food crops. Food security depends on the Public Distribution System (PDS) and government vigilance and action at times, when this security is threatened.

### What is food security?

Food is as essential for living as air is for breathing. But food security means something more than getting two square meals. Food security has following dimensions (a) *availability of food* means food production within the country, food imports and the previous years stock stored in government granaries.

(b) *accessibility* means food is within reach of every person.

(c) *affordability* implies that an individual has enough money to buy sufficient, safe and nutritious food to meet one's dietary needs.

Thus, food security is ensured in a country only if (1) enough food is available for all the persons (2) all persons have the capacity to buy food of acceptable quality and (3) there is no barrier on access to food.

### Why food security?

The poorest section of the society might be food insecure most of the times while persons above the poverty line might also be food insecure when the country faces a national disaster/calamity like earthquake, drought, flood, tsunami, widespread failure of crops causing famine, etc.

### How is food security affected during a calamity?

Due to a natural calamity, say drought, total production of foodgrains decreases. It creates a shortage of food in the affected areas. Due to shortage of food, the prices goes up. At the high prices, some people cannot afford to buy food. If such calamity happens in a very wide spread area or is stretched over a longer time period, it may cause a situation of starvation. A massive starvation might take a turn of famine.

In the 1970s, food security was understood as the "availability at all times of adequate supply of basic foodstuffs" (UN, 1975). Amartya Sen added a new dimension to food security and emphasised the "access" to food through what he called 'entitlements' — a combination of what one can produce, exchange in the



market along with state or other socially provided supplies. Accordingly, there has been a substantial shift in the understanding of food security. The 1995 World Food Summit declared, "Food security at the individual, household, regional, national and global levels exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life" (FAO, 1996, p.3). The declaration further recognises that "poverty eradication is essential to improve access to food".

*A Famine is characterised by wide spread deaths due to starvation and epidemics caused by forced use of contaminated water or decaying food and loss of body resistance due to weakening from starvation.*

The most devastating famine that occurred in India was the FAMINE OF BENGAL in 1943. This famine killed thirty lakh people in the province of Bengal.

**Do you know who were affected the most by the famine?** The agricultural labourers, fishermen, transport workers and other casual labourers were affected the most by dramatically increasing price of rice. They were the ones who died in this famine.

Nothing like the Bengal Famine has happened in India again. But it is disturbing to note that even today, there are places Kalahandi and Kashipur in Orissa where famine-like conditions have been existing for many years and where some starvation deaths have also been reported. Starvation deaths are also reported in Baran district of Rajasthan, Palamau district of Jharkhand and many other remote areas during the recent years. Therefore, food security is needed in a country to ensure food at all times.

#### Who are food-insecure?

Although a large section of people suffer from food and nutrition insecurity in India, the worst affected groups are landless people with little or no land to depend upon, traditional artisans, providers of traditional services, petty self-employed workers and destitutes including beggars. In the urban areas, the food insecure families are those whose working members are generally employed in ill-paid occupations and casual labour market. These workers are largely engaged in seasonal activities and are paid very low wages that just ensure bare survival.

The social composition along with the inability to buy food also plays a role in food insecurity. The SCs, STs and some sections of the OBCs (lower castes among them) who have either poor land-base or very low land productivity are prone to food insecurity. The people affected by natural disasters, who have to migrate to other areas in search of work, are also among the most food insecure people. A high incidence of malnutrition prevails among women. This is a matter of serious concern as it puts even the unborn baby at the risk of malnutrition. A large proportion of pregnant and nursing mothers and children under the age of 5 years constitute an important segment of the food insecure population. The food insecure people are disproportionately large in some regions of the country, such as economically backward states with high incidence of poverty, tribal and remote areas, regions more prone to natural disasters etc. In fact, the states of Uttar Pradesh (eastern and south-eastern parts), Bihar, Jharkhand, Orissa, West Bengal, Chattisgarh, parts of Madhya Pradesh and Maharashtra account for largest number of food insecure people in the country.

According to the National Health and Family Survey (NHFS) 1998–99, the number of such women and

children is approximately 11 crore.

Hunger is another aspect indicating food insecurity. Hunger is not just an expression of poverty, it brings about poverty. The attainment of food security therefore involves eliminating current hunger and reducing the risks of future hunger. Hunger has chronic and seasonal dimensions. Chronic hunger is a consequence of diets persistently inadequate in terms of quantity and/or quality. Poor people suffer from chronic hunger because of their very low income and in turn inability to buy food even for survival. Seasonal hunger is related to cycles of food growing and harvesting. This is prevalent in rural areas because of the seasonal nature of agricultural activities and in urban areas because of the casual labour, e.g., there is less work for casual construction labour during the rainy season. This type of hunger exists when a person is unable to get work for the entire year.

**Table 4.2:** Percentage of Households with 'Hunger' in India

Year	Type of hunger		
	Seasonal	Chronic	Total
<i>Rural</i>			
1983	16.2	2.3	18.5
1993–94	4.2	0.9	5.1
1999–2000	2.6	0.7	3.3
<i>Urban</i>			
1983	5.6	0.8	6.4
1993–94	1.1	0.5	1.6
1999–2000	0.6	0.3	0.9

*Source: Sagar (2004)*

The percentage of seasonal as well as chronic hunger has declined in India as shown in the above table.

#### India is aiming at Self-sufficiency in Foodgrains since Independence.

After independence, Indian policy makers adopted all measures to achieve self-sufficiency in food grains. India adopted a new strategy in agriculture, which resulted in the '**Green Revolution**' especially in the production of wheat and rice.

Indira Gandhi, the then Prime Minister of India, officially recorded the impressive strides of the Green revolution in agriculture by releasing a special stamp entitled 'Wheat Revolution' in July 1968. The success of wheat was later replicated in rice. The increase in foodgrains was, however, disproportionate. The highest rate of growth was achieved in Punjab and Haryana, where foodgrain production jumped from 7.23 million tonnes in 1964–65 to reach an all-time high of 218 million tonnes in 2009–10. Production in Maharashtra, Madhya Pradesh, Bihar, Orissa and the northeastern states continued to stagger. Tamil Nadu and Andhra Pradesh, on the other hand, recorded significant increases in rice yield.

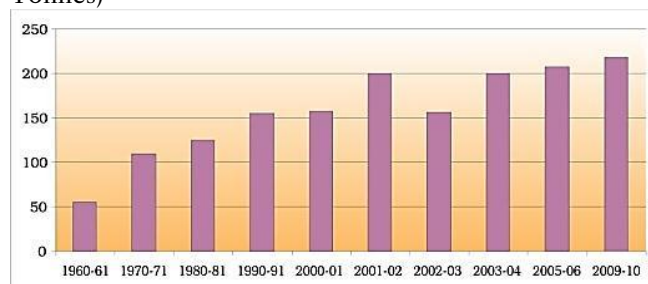
#### Food Security in India

Since the advent of the Green revolution in the early-'70s, the country has avoided famine even during adverse weather conditions.

India has become self-sufficient in foodgrains during the last thirty years because of a variety of crops grown all over the country. The availability of foodgrains (even in adverse weather conditions or otherwise) at the country level has further been ensured with a carefully designed

food security system by the government. This system has two components: (a) buffer stock and (b) public distribution system.

**Graph 4.1:** Production of Foodgrains in India (Million Tonnes)



Source: Economic Survey 2011-12

### What is Buffer stock?

Buffer Stock is the stock of foodgrains, namely wheat and rice procured by the government through **Food Corporation of India (FCI)**. The FCI purchases wheat and rice from the farmers in states where there is surplus production. The farmers are paid a pre-announced price for their crops. This price is called **Minimum Support Price**. The MSP is declared by the government every year before the sowing season to provide incentives to the farmers for raising the production of these crops. The purchased foodgrains are stored in granaries. Do you know why this buffer stock is created by the government? This is done to distribute foodgrains in the deficit areas and among the poorer strata of society at a price lower than the market price also known as **Issue Price**. This also helps resolve the problem of shortage of food during adverse weather conditions or during the periods of calamity.

### What is the Public Distribution System?

The food procured by the FCI is distributed through government regulated ration shops among the poorer section of the society. This is called the public distribution system (PDS). Ration shops are now present in most localities, villages, towns and cities. There are about 5.5 lakh ration shops all over the country. Ration shops also known as **Fair Price Shops** keep stock of foodgrains, sugar, kerosene oil for cooking. These items are sold to people at a price lower than the market price. Any family with a ration card\* can buy a stipulated amount of these items (e.g. 35 kg of grains, 5 litres of kerosene, 5 kgs of sugar etc.) every month from the nearby ration shop.

The introduction of **Rationing** in India dates back to the 1940s against the backdrop of the Bengal famine. The rationing system was revived in the wake of an acute food shortage during the 1960s, prior to the Green Revolution. In the wake of the high incidence of poverty levels, as reported by the NSSO in the mid-1970s, three important food intervention programmes were introduced: Public Distribution System (PDS) for food grains (in existence earlier but strengthened thereafter); Integrated Child Development Services (ICDS) (introduced in 1975 on an experimental basis) and Food-for-Work\*\* (FFW) (introduced in 1977-78). Over the years, several new programmes have been launched and some have been restructured with the growing experience of administering the programmes. At present, there are several Poverty Alleviation Programmes (PAPs), mostly in rural areas, which have an explicit food component also. While some of the programmes such as PDS, mid-day meals etc. are exclusively food security programmes, most of the PAPs also enhance food security. Employment programmes

greatly contribute to food security by increasing the income of the poor.

### Current Status of Public Distribution System

Public Distribution System (PDS) is the most important step taken by the Government of India (GoI) towards ensuring food security. In the beginning the coverage of PDS was universal with no discrimination between the poor and non-poor. Over the years, the policy related to PDS has been revised to make it more efficient and targeted. In 1992, Revamped Public Distribution System (RPDS) was introduced in 1,700 blocks in the country. The target was to provide the benefits of PDS to remote and backward areas. From June 1997, in a renewed attempt, Targeted Public Distribution

### \*\*National Food for Work Programme

National Food for Work Programme was launched on November 14, 2004 in 150 most backward districts of the country with the objective of intensifying the generation of supplementary wage employment. The programme is open to all rural poor who are in need of wage employment and desire to do manual unskilled work. It is implemented as a 100 per cent centrally sponsored scheme and the foodgrains are provided to States free of cost. The Collector is the nodal officer at the district level and has the overall responsibility of planning, implementation, coordination, monitoring and supervision. For 2004-05, Rs 2,020 crore have been allocated for the programme in addition to 20 lakh tonnes of foodgrains.

System (TPDS) was introduced to adopt the principle of targeting the 'poor in all areas'. It was for the first time that a differential price policy was adopted for poor and non-poor. Further, in 2000, two special schemes were launched viz., Antyodaya Anna Yojana\*\*\* (AAY) and the Annapurna Scheme (APS) with special target groups of 'poorest of the poor' and 'indigent senior citizens', respectively. The functioning of these two schemes was linked with the existing network of the PDS.

The PDS has proved to be the most effective instrument of government policy over the years in stabilising prices and making food available to consumers at affordable prices. It has been instrumental in averting widespread hunger and famine by supplying food from surplus regions of the country to the deficit ones. In addition, the prices have been under revision in favour of poor households in general.

The system, including the minimum support price and procurement has contributed to an increase in food grain production and provided income security to farmers in certain regions.

However, the Public Distribution System has faced severe criticism on several grounds. Instances of hunger are prevalent despite overflowing granaries. FCI godowns are overflowing with grains, with some rotting away and some being eaten by rats. The Graph 4.2 shows the rising stocks of foodgrains till 2012.

**Table 4.3:** Some Important Features of PDS

Name of scheme	Year of Introduction	Coverage target group	Latest volume	Issue price (Rs per kg.)
PDS	Up to 1992	Universal	—	W-2.34 R-2.89
RPDS	1992	Backward blocks	20 kg of food grains	W-2.80 R-3.77
TPDS	1997	Poor and non-poor	35 kg of food grains	BPL - W-2.50 R-3.50 APL-W-4.50 R-7.00
AAY	2000	Poorest of the poor	35 kg of food grains	W-2.00 R-3.00
APS	2000	Indigent senior citizens	10 kg of food grains	Free

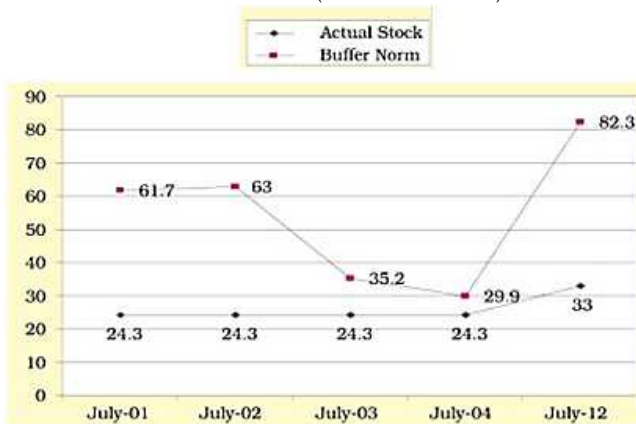
**Note:** W - Wheat; R - Rice; BPL - Below poverty line;

APL - Above poverty line

### \*\*\*Antyodaya Anna Yojana (AAY)

AAY was launched in December 2000. Under the scheme one crore of the poorest among the BPL families covered under the targeted public distribution system were identified. Poor families were identified by the respective state rural development departments through a Below Poverty Line (BPL) survey. Twenty five kilograms of foodgrains were made available to each eligible family at a highly subsidised rate of Rs 2 per kg for wheat and Rs 3 per kg for rice. This quantity has been enhanced from 25 to 35 kgs with effect from April 2002. The scheme has been further expanded twice by additional 50 lakh BPL families in June 2003 and in August 2004. With this increase, 2 crore families have been covered under the AAY. Subsidy is a payment that a government makes to a producer to supplement the market price of a commodity. Subsidies can keep consumer prices low while maintaining a higher income for domestic producers.

**Graph 4.2:** Central Foodgrains (Wheat + Rice) Stock and Minimum Buffer Norm (Million Tonnes)



**Source:** Economic survey 2012.

In July 2012, the stock of wheat and rice with FCI was 82 million tonnes which was much more than the minimum buffer norms of 33 million tonnes.

The decline in stocks continued in the subsequent years. However, these remained consistently higher than the buffer norms. The situation improved with the distribution of foodgrains under different schemes launched by the government. There is a general consensus that high level of buffer stocks of foodgrains is very undesirable and can be wasteful. The storage of massive food stocks has been responsible for high carrying costs, in addition to wastage and deterioration in grain quality. Freezing of MSP for a few years should be considered seriously.

The increased food grains procurement at enhanced MSP is the result of the pressure exerted by leading foodgrain producing states, such as Punjab, Haryana and Andhra Pradesh. Moreover, as the procurement is concentrated in a few prosperous regions (Punjab, Haryana, Western Uttar Pradesh, Andhra Pradesh and to a lesser extent in West Bengal) and mainly of two crops— wheat and rice— increase in MSP has induced farmers, particularly in surplus states, to divert land from production of coarse grains, which is the staple food of the poor, to the production of rice and wheat. The intensive utilisation of water in the cultivation of rice has also led to environmental degradation and fall in the water level, threatening the sustainability of the agricultural development in these states. The rising Minimum Support Prices (MSP) have raised the maintenance cost of procuring foodgrains by the

government. Rising transportation and storage costs of the FCI are other contributing factors in this increase. Another major area of concern is the marked ineffectiveness of PDS, which is apparent from the fact that the average consumption of PDS grain at the all-India level is only 1 kg per person per month. The average consumption figure is as low as less than 300 gm per person per month in the states of Bihar, Orissa and Uttar Pradesh. In contrast, the average consumption in most of the southern states like Kerala, Karnataka, Tamil Nadu and Himachal Pradesh is in the range of 3–4 kgs per person per month. As a result the poor have to depend on markets rather than the ration shops for their food needs. In Madhya Pradesh only 5% of wheat and rice consumption of the poor are met through the ration shops. In Uttar Pradesh and Bihar the percentage is still lower.

PDS dealers are sometimes found resorting to malpractices like diverting the grains to open market to get better margin, selling poor quality grains at ration shops, irregular opening of the shops, etc. It is common to find that ration shops regularly have unsold stocks of poor quality grains left. This has proved to be a big problem. When ration shops are unable to sell, a massive stock of foodgrains piles up with the FCI. In recent years, there is another factor that has led to the decline of the PDS. Earlier every family, poor and non-poor had a ration card with a fixed quota of items such as rice, wheat, sugar etc. These were sold at the same low price to every family. The three types of cards and the range of prices that you see today did not exist. A large number of families could buy foodgrains from the ration shops subject to a fixed quota. These included low income families whose incomes were marginally higher than the below poverty line families. Now, with TPDS of three different prices, any family above the poverty line gets very little discount at the ration shop. The price for APL family is almost as high as open market price, so there is little incentive for them to buy these items from the ration shop.

### Role of cooperatives in food security

The cooperatives are also playing an important role in food security in India especially in the southern and western parts of the country. The cooperative societies set up shops to sell low priced goods to poor people. For example, out of all fair price shops running in Tamil Nadu, around 94 per cent are being run by the cooperatives. In Delhi, Mother Dairy is making strides in provision of milk and vegetables to the consumers at controlled rate decided by Government of Delhi. Amul is another success story of Cooperatives in milk and milk products from Gujarat. It has brought about the White Revolution in the country. These are a few examples of many more cooperatives running in different parts of the country ensuring food security of different sections of society.

Similarly, in Maharashtra, Academy of Development Science (ADS) has facilitated a network of NGOs for setting up grain banks in different regions. ADS organises training and capacity building programmes on food security for NGOs. Grain Banks are now slowly taking shape in different parts of Maharashtra. ADS efforts to set up Grain Banks, to facilitate replication through other NGOs and to influence the Government's policy on food security are thus paying rich dividends. The ADS Grain Bank programme is acknowledged as a successful and innovative food security intervention.

### Summary



Food security of a nation is ensured if all of its citizens have enough nutritious food available, all persons have the capacity to buy food of acceptable quality and there is no barrier on access to food. The people living below the poverty line might be food insecure all the time while better off people might also turn food insecure due to calamity or disaster. Although a large section of people suffer from food and nutrition insecurity in India, the worst affected groups are landless or land poor households in rural areas and people employed in ill paid occupations and casual labourers engaged in seasonal activities in the urban areas. The food insecure people are disproportionately large in some regions of the country, such as economically backward states with high incidence of poverty, tribal and remote areas, regions more prone to natural disasters etc. To ensure availability of food to all sections of the society the Indian government carefully designed food security system, which is composed of two components: (a) buffer stock and (b) public distribution system. In addition to PDS, various poverty alleviation programmes were also started which comprised a component of food security. Some of these programmes are: Integrated Child Development Services (ICDS); Food-for-Work (FFW); Mid-Day Meals; Antyodaya Anna Yojana (AAY) etc. In addition to the role of the government in ensuring food security, there are various cooperatives and NGOs also working intensively towards this direction.

**Important Terms** **Food security:** Food security means availability, accessibility and afford ability of food to all people at all times. **Famine:** It is characterized by widespread deaths due to starvation and epidemics caused by forced use of contaminated water or decaying food and loss of body

resistance due to weakening of starvation. **Green Revolution:** It is a programme under which HYV varieties of wheat and rice seedlings are planted in the fields of poor farmers. **Food Corporation of India:** Since the Green Revolution, food grain production in India has increased manifold. The food security system in India consists of the creation of buffer stocks of food grains and their distribution through the public distribution system. Every year, after the harvest of food grains like wheat and rice, the government buys food grains from farmers through the Food Corporation of India. **Rationing:** It is a term given to the government controlled distribution of resources and scarce goods or services. It restricts how much people are allowed to buy or consume at a particular time in a particular period. **Malnutrition:** It is a state of not having enough food or not getting nutritious food. **Hunger:** Hunger is both a cause and effect of poverty and indicates food insecurity. **Seasonal hunger:** It is related to the cycles of food security and insecurity. Seasonal hunger exists when a person is unable to get work for the entire year. It is a type of hunger when a person doesn't get proper food neither in terms of quantity nor in terms of quality for some time during the year. **Chronic hunger:** It is a consequence of diets persistently inadequate in terms of quantity and/or quality. Poorer sections of the society suffer from chronic hunger because of their very low income and in turn inability to buy food even for their survival. **Buffer stock:** The food grains so procured are stored in warehouses of the FCI. This stock of food grains is called the buffer stock. The buffer stock is used to prevent a shortage of food in adverse conditions like crop failure and natural calamities. **Cooperatives:** Cooperative societies in India are playing a significant role in ensuring food security and are more active in western and southern regions of the country. In Tamil Nadu, around 94% of all Fair Price shops run under the Public Distribution System are managed by cooperatives.

# NCERT Class 10

## Economy (Understanding Economic Development)

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 Development

The idea of development or progress has always been with us. We have aspirations or desires about what we would like to do and how we would like to live. Similarly, we have ideas about what a country should be like. What are the essential things that we require? Can life be better for all? How should people live together? Can there be more equality? Development involves thinking about these questions and about the ways in which we can work towards achieving these goals. This is a complex task and in this chapter we shall make a beginning at understanding development..

*"Without me they cannot develop... in this system I cannot develop"*

#### What Development Promises — Different People, Different Goals

**Landless rural labourers:** More days of work and better wages; local school is able to provide quality education for their children; there is no social discrimination and they too can become leaders in the village.

**Prosperous farmers from Maharashtra:** Assured a high family income through higher support prices for their crops and through hardworking and cheap labourers; they should be able to settle their children abroad.

**A girl from a rich urban family:** She gets as much freedom as her brother and is able to decide what she wants to do in life. She is able to pursue her studies abroad.

*What do you think would be the developmental goals of the following people? Farmers who depend only on rain for growing crops? A rural woman from a land owning family? Urban unemployed youth? A boy from a rich urban family? An adivasi from Narmada valley?*

Do all of these persons have the same notion of development or progress? Most likely not. Each one of them seeks different things. They seek things that are most important for them, i.e., that which can fulfil their aspirations or desires. In fact, at times, two persons or groups of persons may seek things which are conflicting. A girl expects as much freedom and opportunity as her brother, and that he also shares in the household work. Her brother may not like this. Similarly, to get more electricity, industrialists may want more dams. But this may submerge the land and disrupt the lives of people who are displaced — such as tribals. They might resent this and may prefer small check dams or tanks to irrigate their land.

So, two things are quite clear: one, **different persons can have different developmental goals** and two, **what may be development for one may not be**

**development for the other. It may even be destructive for the other.**

#### INCOME AND OTHER GOALS

What people desire are regular work, better wages, and decent price for their crops or other products that they produce. In other words, they want more income.

Besides seeking more income, one-way or the other, people also seek things like equal treatment, freedom, security, and respect of others. They resent discrimination. All these are important goals. In fact, in some cases, these may be more important than more income or more consumption because material goods are not all that you need to live.

Money, or material things that one can buy with it, is one factor on which our life depends. But the quality of our life also depends on non-material things mentioned above. If it is not obvious to you, then just think of the role of your friends in your life. You may desire their friendship. Similarly, there are many things that are not easily measured but they mean a lot to our lives. These are often ignored. However, it will be wrong to conclude that what cannot be measured is not important.

**For development, people look at a mix of goals.** It is true that if women are engaged in paid work, their dignity in the household and society increases.

However, it is also the case that if there is respect for women there would be more sharing of housework and a greater acceptance of women working outside. A safe and secure environment may allow more women to take up a variety of jobs or run a business.

Hence, the developmental goals that people have are not only about better income but also about other important things in life.

#### NATIONAL DEVELOPMENT

If, as we have seen above, individuals seek different goals, then their notion of national development is also likely to be different. Discuss among yourselves on what India should do for development.

Most likely, you would find that different students in the class have given different answers to the above question. In fact, you might yourself think of many different answers and not be too sure of any of these. **It is very important to keep in mind that different persons could have different as well as conflicting notions of a country's development.**

However, can all the ideas be considered equally important? Or, if there are conflicts how does one decide? What would be a fair and just path for all? We also have to think whether there is a better way of doing things. Would the idea benefit a large number of people or only a small group? National development means thinking about these questions.

#### HOW TO COMPARE DIFFERENT COUNTRIES

**OR STATES?**

You might ask — if development can mean different things, how come some countries are generally called developed and others under-developed? Before we come to this, let us consider another question. When we compare different things, they could have similarities as well as differences. Which aspects do we use to compare them? Let us look at students in the class itself. How do we compare different students? They differ in their height, health, talents and interests. The healthiest student may not be the most studious one. The most intelligent student may not be the friendliest one. So, how do we compare students? The criterion we may use depends on the purpose of comparison. We use different criterion to choose a sports team, a debate team, a music team or a team to organise a picnic. Still, if for some purpose, we have to choose the criterion for the all-round progress of children in the class, how shall we do it?

**Usually we take one or more important characteristics of persons and compare them based on these characteristics. Of course, there can be differences about what are important characteristics that should form the basis of comparison: friendliness and spirit of cooperation, creativity or marks secured?**

This is true of development too. For comparing countries, their income is considered to be one of the most important attributes. Countries with higher income are more developed than others with less income. This is based on the understanding that more income means more of all things that human beings need. Whatever people like, and should have, they will be able to get with greater income. So, greater income itself is considered to be one important goal. Now, what is the income of a country? Intuitively, the income of the country is the income of all the residents of the country. This gives us the total income of the country.

However, for comparison between countries, total income is not such a useful measure. Since, countries have different populations, comparing total income will not tell us what an average person is likely to earn. Are people in one country better off than others in a different country? Hence, we compare the average income which is the total income of the country divided by its total population. **The average income is also called per capita income.**

**Per capita Income Criterion (World Bank)**

(i) World Bank in its World Development Report classifies countries according to the Per Capita Income. (ii) Countries with PCI of more than US \$ 12616 per annum and above are called rich countries. (iii) Countries with PCI less than US \$ 1035 are called poor countries. (iv) Countries with income between US \$ 1530 per annum are called low middle income countries.

**Limitations:** (i) It considers only income and not other aspects such as literacy, health, life expectancy, etc. (ii) World Development Report (WDR) only tells about income and not how it is distributed among the citizens. Some may be very rich but the masses may be poor.

**INCOME AND OTHER CRITERIA**

When we looked at individual aspirations and goals, we found that people not only think of better income but also have goals such as security, respect for others, equal treatment, freedom etc. in mind. Similarly, when we

think of a nation or a region, we may, besides average income, think of other equally important attributes like health, education, public facilities etc.

**Average Income:** While 'averages' are useful for comparison, they also hide disparities.

**Infant Mortality Rate (or IMR)** indicates the number of children that die before the age of one year as a proportion of 1000 live children born in that particular year. Low IMR could be a desirable developmental goal.

**Literacy Rate measures** the proportion of literate population in the 7 and above age group.

**Net Attendance Ratio** is the total number of children of age group 6-10 attending school as a percentage of total number of children in the same age group. More accessibility to education and higher literacy rates reflect higher development in a society.

**PUBLIC FACILITIES**

How is it that the average person in Maharashtra has more income than the average person in Kerala but lags behind in these crucial areas? The reason is — **money in your pocket cannot buy all the goods and services that you may need to live well.** So, income by itself is not a completely adequate indicator of material goods and services that citizens are able to use. For example, normally, your money cannot buy you a pollution-free environment or ensure that you get unadulterated medicines, unless you can afford to shift to a community that already has all these things. Money may also not be able to protect you from infectious diseases, unless the whole of your community takes preventive steps.

Actually for many of the important things in life the best way, also the cheapest way, is to provide these goods and services collectively. Just think — will it be cheaper to have collective security for the whole locality or for each house to have its own security man? What if no one, other than you, in your village or locality is interested in studying? Would you be able to study? Not unless your parents could afford to send you to some private school elsewhere. So you are actually able to study because many other children also want to study and because many people believe that the government should open schools and provide other facilities so that all children have a chance to study. Even now, in many areas, children, particularly girls, are not able to achieve secondary level schooling because government/society has not provided adequate facilities.

Kerala has a low Infant Mortality Rate because it has adequate provision of basic health and educational facilities. Similarly, in some states, the Public Distribution System (PDS) functions well. If some PDS shop, i.e. ration shop, does not function properly in such places, the people there are able to get the problem rectified. Health and nutritional status of people of such states is certainly likely to be better.

**Important**

One way to find out if adults are undernourished is to calculate what nutrition scientists call Body Mass Index (BMI). This is easy to calculate. Take the weight of the person in kg. Then take the height in metres. Divide the weight by the square of the height. If this figure is less than 18.5 then the person would be considered undernourished. However, if this BMI is more than 25, then a person is overweight. *Do remember that this criterion is not applicable to growing children.*

**HUMAN DEVELOPMENT REPORT**

Once it is realised that even though the level of income is important, yet it is an inadequate measure of the level



of development, we begin to think of other criterion. There could be a long list of such criterion but then it would not be so useful. What we need is a small number of the most important things. Health and education indicators, such as the ones we used in comparison of Kerala and Maharashtra, are among them. Over the past decade or so, health and education indicators have come to be widely used along with income as a measure of development. For instance, Human Development Report published by UNDP compares countries based on the educational levels of the people, their health status and per capita income. Isn't it surprising that a small country in our neighbourhood, Sri Lanka, is much ahead of India in every respect and a big country like ours has such a low rank in the world? Further Nepal has half the per capita income of India, yet it is not far behind India in life expectancy and literacy levels. Many improvements have been suggested in calculating HDI and many new components have been added to the Human Development Report but, by pre-fixing Human to Development, it has made it very clear that what is important in development is what is happening to citizens of a country. It is people, their health, their well being, that is most important.

### Compare UNDP with the World Bank report.

**As seen above** World Bank in its World Development Report classifies countries according to the Per Capita Income. While UNDP has taken a broader view, It include: (a) Education, (b) Health and (c) Per-capita income as the indicators of development  
*Do you think there are certain other aspects that should be considered in measuring human development?*

### SUSTAINABILITY OF DEVELOPMENT

"We have not inherited the world from our forefathers — we have borrowed it from our children." Suppose for the present that a particular country is quite developed. We would certainly like this level of development to go up further or at least be maintained for future generations. This is obviously desirable. However, since the second half of the twentieth century, a number of scientists have been warning that the present type, and levels, of development are not sustainable. Let's understand why this is so through the following example:

#### Example 1: Groundwater in India

"Recent evidence suggests that the groundwater is under serious threat of overuse in many parts of the country. About 300 districts have reported a water level decline of over 4 metres during the past 20 years. Nearly one-third of the country is overusing their groundwater reserves. In another 25 years, 60 per cent of the country would be doing the same if the present way of using this resource continues. Groundwater overuse is particularly found in the agriculturally prosperous regions of Maharashtra and Western U.P., hard rock plateau areas of central and south India, some coastal areas and the rapidly growing urban settlements."

(a) Why ground water is overused?

(b) Can there be development without overuse?

Groundwater is an example of renewable resources. These resources are replenished by nature as in the case of crops and plants. However, even these resources may be overused. For example, in the case of groundwater, if we use more than what is being replenished by rain then we would be overusing this resource. Non-renewable resources are those which will get exhausted after years of use. We have a fixed stock on

earth which cannot be replenished. We do discover new resources that we did not know of earlier. New sources in this way add to the stock. However, over time, even this will get exhausted.

For example, crude oil that we extract from the earth is a non-renewable resource. However we may find a source of oil that we did not know of earlier. Explorations are being undertaken all the time.

#### Example 2: Exhaustion of Natural Resources

How many years the stock of crude oil will last if people continue to extract it at the present rate. The reserves would last only 43 years more. This is for the world as a whole. However, different countries face different situations. Countries like India depend on importing oil from abroad because they do not have enough stocks of their own. If prices of oil increase this becomes a burden for everyone. There are countries like USA which have low reserves and hence want to secure oil through military or economic power.

The question of sustainability of development raises many fundamentally new issues about the nature and process of development.

(a) Is crude oil essential for the development process in a country? Discuss.

(b) India has to import crude oil. What problems do you anticipate for the country looking at the above situation? Consequences of environmental degradation do not respect national or state boundaries; this issue is no longer region or nation specific. Our future is linked together. Sustainability of development is comparatively a new area of knowledge in which scientists, economists, philosophers and other social scientists are working together.

In general, the question of development or progress is perennial. At all times as a member of society and as individuals we need to ask where we want to go, what we wish to become and what our goals are. So the debate on development continues.

**Important Terms Development:** Development means more income and for higher income they need regular work, better wages and reasonable and fair prices for their products.

**National Income:** It is the sum total of all final goods and services produced in a country during a given period of time plus net factor income from abroad. **Per Capita Income:**

Average income of a person of a country. **Under developed Country:** A country which does not have high income and the standard of living is also low is considered as "Underdeveloped Country". **Infant Mortality Rate:** The number of children that die before the age of one year per 1000 live births in one year. **Literacy Rate:** Proportion of literate population in the 7 and above age group. **Net Attendance Ratio:** Total number of children of age group 6-10 attending school as a percentage of total number of children in the same age group. **Body mass index (BMI):** It is a measure of body fat based on height and weight that applies to adult men and women. **Body Mass Index or BMI = Weight in Kg (Height in Meters)<sup>2</sup>**

**Human Development Index:** It is a composite statistic of life expectancy, education and per capita income indicators, which are used to rank countries into four tiers of human development. **Sustainable Development:** Sustainable development is maintaining a delicate balance between the human need to improve lifestyles and feeling of well-being on one hand, and preserving natural resources and ecosystems, on which we and future generations depend. **Organic Farming:** Vegetable and livestock production using natural sources of nutrients (such as compost, crop residues, and manure) and natural methods of crop and weed control, instead of using synthetic or inorganic agro chemicals. **Fossil Fuels:** A natural fuel such as coal or gas, formed in the geological past from the remains of living organisms. **Global Warming:** A gradual increase in the overall temperature of the earth's atmosphere generally attributed to the greenhouse effect caused by increased levels of carbon dioxide,

chlorofluorocarbons, and other pollutants.

## Chapter 2 Sector Of The Indian Economy

**We begin by looking at different kind of economic activities.** There are many activities that are undertaken by directly using natural resources. Take, for example, the cultivation of cotton. Its growth of the cotton plant, we depend **mainly, but not entirely**, on natural factors like rainfall, sunshine and climate. The product of this activity, cotton, is a natural product. Similarly, in the case of an activity like dairy, we are dependent on the biological process of the animals and availability of fodder etc. The product here, milk, also is a natural product. Similarly, minerals and ores are also natural products. When we produce a good by exploiting natural resources, it is an activity of the **primary sector**. Why primary? This is because it forms the base for all other products that we subsequently make. Since most of the natural products we get are from agriculture, dairy, fishing, forestry, this sector is also called **agriculture and related sector**.

The **secondary sector** covers activities in which natural products are changed into other forms through ways of manufacturing that we associate with industrial activity. It is the next step after primary. The product is not produced by nature but has to be made and therefore some process of manufacturing is essential. This could be in a factory, a workshop or at home. For example, using cotton fibre from the plant, we spin yarn and weave cloth. Using sugarcane as a raw material, we make sugar or *gur*. We convert earth into bricks and use bricks to make houses and buildings. Since this sector gradually became associated with the different kinds of industries that came up, it is also called as **industrial sector**.

After primary and secondary, there is a third category of activities that falls under **tertiary sector** and is different from the above two. These are activities that help in the development of the primary and secondary sectors. These activities, by themselves, do not produce a good but they are an aid or a support for the production process. For example, goods that are produced in the primary or secondary sector would need to be transported by trucks or trains and then sold in wholesale and retail shops. At times, it may be necessary to store these in godowns. We also may need to talk to others over telephone or send letters (communication) or borrow money from banks (banking) to help production and trade. Transport, storage, communication, banking, trade are some examples of tertiary activities. Since these activities generate services rather than goods, the tertiary sector is also called the **service sector**.

Service sector also includes some essential services that may not directly help in the production of goods. For example, we require teachers, doctors, and those who provide personal services such as washermen, barbers, cobblers, lawyers, and people to do administrative and accounting works. In recent times, certain new services based on information technology such as internet cafe, ATM booths, call centres, software companies etc have become important.

**Economic activities, though, are grouped into three different categories, are highly interdependent.**

Imagine what would happen if farmers refuse to sell

sugarcane to a particular sugar mill. The mill will have to shut down.

This is an example of the secondary or industrial sector being dependent on the primary. Imagine what would happen to cotton cultivation if companies decide not to buy from the Indian market and import all cotton they need from other countries. Indian cotton cultivation will become less profitable and the farmers may even go bankrupt, if they cannot quickly switch to other crops. Cotton prices will fall.

Farmers buy many goods such as tractors, pumpsets, electricity, pesticides and fertilisers. Imagine what would happen if the price of fertilisers or pumpsets go up. Cost of cultivation of the farmers will rise and their profits will be reduced.

People working in industrial and service sector need food. Imagine what would happen if there is a strike by transporters and lorries refuse to take vegetables, milk, etc. from rural areas. Food will become scarce in urban areas whereas farmers will be unable to sell their products.

### COMPARING THE THREE SECTORS

The various production activities in the primary, secondary and tertiary sectors produce a very large number of goods and services. Also, the three sectors have a large number of people working in them to produce these goods and services. The next step, therefore, is to see how much goods and services are produced and how many people work in each sector. In an economy there could be one or more sectors which are dominant in terms of total production and employment, while other sectors are relatively small in size.

### How do we count the various goods and services and know the total production in each sector?

With so many thousands of goods and services produced, you might think this is an impossible task. Not only would the task be enormous, you might also wonder how we can add up cars and computers and nails and furniture. It won't make sense.

You are right in thinking so. To get around this problem, economists suggest that the values of goods and services should be used rather than adding up the actual numbers. For example, if 10,000 kgs of wheat is sold at Rs 8 per kg, the value of wheat will be Rs 80,000. The value of 5000 coconuts at Rs 10 per coconut will be Rs 50,000. Similarly, the value of goods and services in the three sectors are calculated, and then added up.

Remember, there is one precaution one has to take. Not every good (or service) that is produced and sold needs to be counted. It makes sense only to include the **final goods and services**. Take, for instance, a farmer who sells wheat to a flour mill for Rs 8 per kg. The mill grinds the wheat and sells the flour to a biscuit company for Rs 10 per kg. The biscuit company uses the flour and things such as sugar and oil to make four packets of biscuits. It sells biscuits in the market to the consumers for Rs 60 (Rs 15 per packet). Biscuits are the final goods, i.e., goods that reach the consumers.

Why are only 'final goods and services' counted? In contrast to final goods, goods such as wheat and the wheat flour in this example are intermediate goods. Intermediate goods are used up in producing final goods and services. The value of final goods **already includes** the value of all the intermediate goods that are used in making the final good. Hence, the value of Rs 60 for the biscuits (final good) already includes the value of flour (Rs 10). Similarly, the value of all other intermediate goods would have been included. To count the value of

the flour and wheat separately is therefore not correct because then we would be counting the value of the same things a number of times. First as wheat, then as flour and finally as biscuits.

**The value of final goods and services produced in each sector during a particular year provides the total production of the sector for that year.** And the sum of production in the three sectors gives what is called the **Gross Domestic Product (GDP)** of a country. It is the value of all final goods and services produced **within a country** during a particular year. GDP shows how big the economy is.

In India, the mammoth task of measuring GDP is undertaken by a central government ministry. This Ministry, with the help of various government departments of all the Indian states and union territories, collects information relating to total volume of goods and services and their prices and then estimates the GDP.

### Historical Change in Sectors

Generally, it has been noted from the histories of many, now developed, countries that at initial stages of development, primary sector was the most important sector of economic activity.

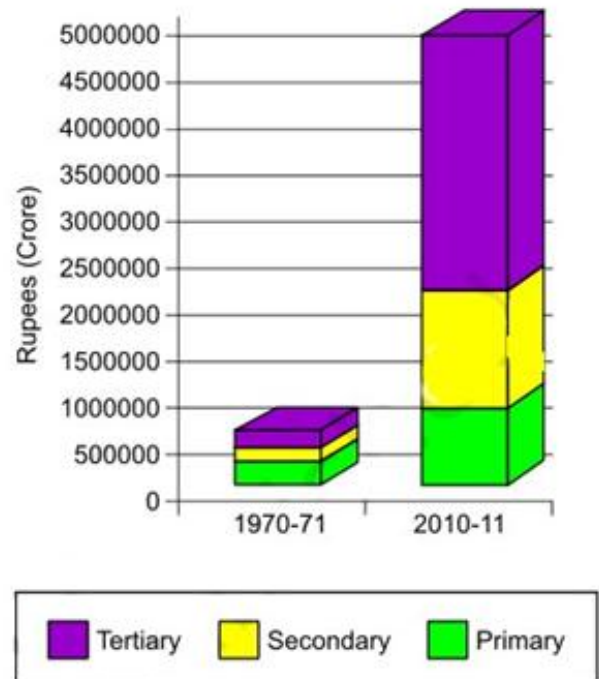
As the methods of farming changed and agriculture sector began to prosper, it produced much more food than before. Many people could now take up other activities. There were increasing number of craft-persons and traders. Buying and selling activities increased many times. Besides, there were also transporters, administrators, army etc. However, at this stage, most of the goods produced were natural products from the primary sector and most people were also employed in this sector.

Over a long time (more than hundred years), and especially because new methods of manufacturing were introduced, factories came up and started expanding. Those people who had earlier worked on farms now began to work in factories in large numbers. People began to use many more goods that were produced in factories at cheap rates. Secondary sector gradually became the most important in total production and employment. Hence, over time, a shift had taken place. This means that the importance of the sectors had changed.

In the past 100 years, there has been a further shift from secondary to tertiary sector in developed countries. The service sector has become the most important in terms of total production. Most of the working people are also employed in the service sector. This is the general pattern observed in developed countries.

What is the total production and employment in the three sectors in India? Over the years have there been changes similar to the pattern observed for the developed countries? We shall see in the next section.

**Graph 1 : GDP by Primary, Secondary and Tertiary Sectors**



### PRIMARY, SECONDARY AND TERTIARY SECTORS IN INDIA

Graph 1 shows the production of goods and services in the three sectors. This is shown for two years, 1970-71 and 2010-11. You can see how the total production has grown over the forty years.

### Rising Importance of the Tertiary Sector in Production

Over the forty years between 1970-71 and 2010-11, while production in all the three sectors has increased, it has increased the most in the tertiary sector. As a result, in the year 2010-11, the tertiary sector has emerged as the largest producing sector in India replacing the primary sector.

Why is the tertiary sector becoming so important in India? There could be several reasons.

First, in any country several services such as hospitals, educational institutions, post and telegraph services, police stations, courts, village administrative offices, municipal corporations, defence, transport, banks, insurance companies, etc. are required. These can be considered as *basic services*. In a developing country the government has to take responsibility for the provision of these services.

Second, the development of agriculture and industry leads to the development of services such as transport, trade, storage and the like, as we have already seen. Greater the development of the primary and secondary sectors, more would be the demand for such services. Third, as income levels rise, certain sections of people start demanding many more services like eating out, tourism, shopping, private hospitals, private schools, professional training etc. You can see this change quite sharply in cities, especially in big cities.

Fourth, over the past decade or so, certain new services such as those based on information and communication technology have become important and essential. The production of these services has been rising rapidly. In Chapter 4, we shall see examples of these new services and the reasons for their expansion.

However, you must remember that not all of the service

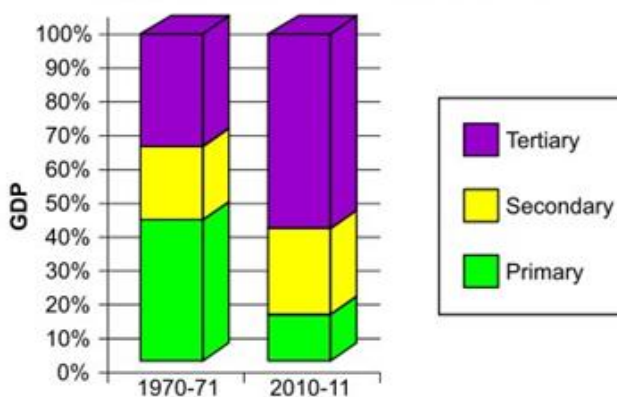


sector is growing equally well. Service sector in India employs many different kinds of people. At one end there are a limited number of services that employ highly skilled and educated workers. At the other end, there are a very large number of workers engaged in services such as small shopkeepers, repair persons, transport persons, etc. These people barely manage to earn a living and yet they perform these services because no alternative opportunities for work are available to them. Hence, only a part of this sector is growing in importance. You shall read more about this in the next section.

### Where are most of the people employed?

Graph 2 presents percentage share of the three sectors in GDP. Now you can directly see the changing importance of the sectors over the forty years.

Graph 2 : Share of Sectors in GDP (%)



A remarkable fact about India is that while there has been a change in the share of the three sectors in GDP, a similar shift has not taken place in employment. Graph 3 shows the share of employment in the three sectors in 1970-71 and 2009-10. The primary sector continues to be the largest employer even now.

Why didn't a similar shift out of primary sector happen in case of employment? It is because not enough jobs were created in the secondary and tertiary sectors. Even though industrial output or the production of goods went up by eight times during the period, employment in the industry went up by only three times. The same applies to tertiary sector as well. While production in the service sector rose by 14 times, employment in the service sector rose less than three times.

As a result, more than half of the workers in the country are working in the primary sector, mainly in agriculture, producing only a quarter of the GDP. In contrast to this, the secondary and tertiary sectors produce three-fourth of the produce whereas they employ less than half the people. Does this mean that the workers in agriculture are not producing as much as they could?

What it means is that there are more people in agriculture than is necessary. So, even if you move a few people out, production will not be affected. In other words, workers in agricultural sector are **under-employed**.

When people are apparently working but all of them are made to work less than their potential. **This kind of underemployment is hidden in contrast to someone who does not have a job and is clearly visible as unemployed. Hence, it is also called disguised unemployment.** Even if we remove a lot of people from agricultural sector and provide them with proper work elsewhere, agricultural production will not suffer. The incomes of the people who take up other work would increase the total family income.

This underemployment can also happen in other sectors. For example there are thousands of casual workers in the service sector in urban areas who search for daily employment. They are employed as painters, plumbers, repair persons and others doing odd jobs. Many of them don't find work everyday. Similarly, we see other people of the service sector on the street pushing a cart or selling something where **they may spend the whole day but earn very little**. They are doing this work because they do not have better opportunities.

### How to Create More Employment?

From the above discussion, we can see that there continues to be considerable underemployment in agriculture. There are also people who are not employed at all. In what ways can one increase employment for people?

- (i) The government can spend some money or banks can provide loans to construct well, etc., which will reduce the dependency of farmers on rains, and they will be able to grow two crops a year. This could lead to a lot of employment generation within the agricultural sector itself reducing the problem of underemployment
- (ii) Construction of Dams and Canals can lead to lot of generation of employment in agricultural sector itself.
- (iii) If government invests some money on transportation and storage of crops or makes better rural roads, it can provide productive employment not just to farmers but also to other who are in services like transport or trade.
- (iv) If local banks give credits at reasonable rates to the small and marginal-farmers, they will be able to buy necessary inputs for their crops in time.
- (v) Another way to solve this problem is to identify, promote and locate industries and services in the semi-rural areas where a large number of people may be employed. Example, Many farmers grow arhar and chickpea, for them a dal-mill to procure and process these & sell in the cities; opening a cold storage will give an opportunity to the farmers to store their produce like potato, & onion and sell them at good price; villagers near forests can start with honey collection, etc.
- (vi) To improve health situation we need health centres, hospitals & for that doctors, nurses, workers.
- (vii) Similarly to provide education to all children we would need lot of schools which can also generate employment.
- (viii) Tourism: Every state or region has the potential for increasing the income and employment for people in that area. This can also be done by promoting tourism or regional craft industry.

- (ix) New services like IT are also creating jobs. All these are the long term projects but government also has certain short term projects for people: NREGA-2005.

**What groups of people do you think are unemployed or underemployed in your area? Can you think of some measures that could be taken up for them?**

aspects of development talked about in Chapter 1. Every state or region has potential for increasing the income and employment for people in that area. It could be tourism, or regional craft industry, or new services like IT. Some of these would require proper planning and support from the government. For example, the same study by the Planning Commission says that if tourism as a sector is improved, every year we can give additional employment to more than 35 lakh people.

We must realise that some of the suggestions discussed

above would take a long time to implement. For the short-term, we need some quick measures. Recognising this, the central government in India recently made a law implementing the **Right to Work** in 200 districts of India. It is called **National Rural Employment Guarantee Act 2005 (NREGA 2005)**. Under NREGA 2005, all those who are able to, and are in need of, work are guaranteed 100 days of employment in a year by the government. If the government fails in its duty to provide employment, it will give unemployment allowances to the people. The types of work that would in future help to increase the production from land will be given preference under the Act.

### **DIVISION OF SECTORS AS ORGANISED AND UNORGANISED**

Let us examine another way of classifying activities in the economy. This looks at the way people are employed. What are their conditions of work? Are there any rules and regulations that are followed as regards their employment?

#### **Differentiate between organised and unorganized sector.**

**Organized Sector: (i)** It is the one where the terms of employment are regular and people have assured work. **(ii)** They are registered by the government and have to follow its rules and regulations which are given in various laws such as the Factories Act, Minimum Wages Act, etc. **(iii)** It is called organized because it has some process and procedures. **(iv)** Workers in the organized sector enjoy security of employment. They are expected to work only a fix number of hours. If they work more, they have to be paid overtime by the employer. **(v)** They also get several other benefits from the employers like paid leave, payment during holidays, provident fund, pensions, gratuity, medical benefits, etc.

**Unorganized Sector: (i)** These are small and scattered units which are largely outside the control of the government. **(ii)** There are rules and regulations but these are not followed. **(iii)** Jobs here are low-paid and often not regular. **(iv)** Employment is not secure as people can be asked to leave without any reason. **(v)** There is no provision for overtime, paid leave, holidays, leave due to sickness, etc.

#### **How to Protect Workers in the Unorganised Sector?**

The organised sector offers jobs that are the most sought-after. But the employment opportunities in the organised sector have been expanding very slowly. It is also common to find many organised sector enterprises in the unorganised sector. They adopt such strategies to evade taxes and refuse to follow laws that protect labourers. As a result, a large number of workers are forced to enter the unorganised sector jobs, which pay a very low salary. They are often exploited and not paid a fair wage. Their earnings are low and not regular. These jobs are not secure and have no other benefits. Since the 1990s, it is also common to see a large number of workers losing their jobs in the organised sector. These workers are forced to take up jobs in the unorganised sector with low earnings. Hence, besides the need for more work, there is also a need for protection and support of the workers in the unorganised sector.

When factories close down, many once regular workers are found selling goods or pushing a cart or doing some other odd job who are these vulnerable people who need protection?

In the rural areas, the unorganised sector mostly

comprises of landless agricultural labourers, small and marginal farmers, sharecroppers and artisans (such as weavers, blacksmiths, carpenters and goldsmiths). Nearly 80 per cent of rural households in India are in small and marginal farmer category. These farmers need to be supported through adequate facility for timely delivery of seeds, agricultural inputs, credit, storage facilities and marketing outlets.

In the urban areas, unorganised sector comprises mainly of workers in small-scale industry, casual workers in construction, trade and transport etc., and those who work as street vendors, head load workers, garment makers, rag pickers etc. Small-scale industry also needs government's support for procuring raw material and marketing of output. The casual workers in both rural and urban areas need to be protected.

We also find that majority of workers from scheduled castes, tribes and backward communities find themselves in the unorganised sector. Besides getting the irregular and low paid work, these workers also face social discrimination. Protection and support to the unorganised sector workers is thus necessary for both economic and social development.

### **SECTORE IN TERMS OF OWNERSHIPS: PUBLIC AND PRIVATE SECTORS**

Another way of classifying economic activities into sectors could be on the basis of who owns assets and is responsible for the delivery of services. In the **public** sector, the government owns most of the assets and provides all the services. In the **private** sector, ownership of assets and delivery of services is in the hands of private individuals or companies. Railways or post office is an example of the public sector whereas companies like Tata Iron and Steel Company Limited (TISCO) or Reliance Industries Limited (RIL) are privately owned.

Activities in the private sector are guided by the motive to earn profits. To get such services we have to pay money to these individuals and companies. The purpose of the public sector is not just to earn profits.

Governments raise money through taxes and other ways to meet expenses on the services rendered by it.

Modern day governments spend on a whole range of activities. What are these activities? Why do governments spend on such activities? Let's find out.

There are several things needed by the society as a whole but **which the private sector will not provide at a reasonable cost**. Why? Some of these need spending large sums of money, which is beyond the capacity of the private sector. Also, collecting money from thousands of people who use these facilities is not easy. Even if they do provide these things they would charge a high rate for their use. Examples are construction of roads, bridges, railways, harbours, generating electricity, providing irrigation through dams etc. Thus, governments have to undertake such heavy spending and ensure that these facilities are available for everyone.

There are some activities, **which the government has to support**. The private sector may not continue their production or business unless government encourages it. For example, selling electricity at the cost of generation may push up the costs of production of goods in many industries. Many units, especially small-scale units, might have to shut down. Government here steps in by producing and supplying electricity at rates which these industries can afford. Government has to bear part of the cost.

Similarly, the Government in India buys wheat and rice

from farmers at a 'fair price'. This it stores in its godowns and sells at a lower price to consumers through ration shops. The government has to bear some of the cost. In this way, the government supports both farmers and consumers.

There are a large number of activities which are the primary responsibility of the government. **The government must spend on these.** Providing health and education facilities for all is one example. We have discussed some of these issues in the first chapter.

Running proper schools and providing quality education, particularly elementary education, is the duty of the government. India's size of illiterate population is one of the largest in the world. Similarly, we know that nearly half of India's children are malnourished and a quarter of them are critically ill. The infant mortality rate of Orissa (87) or Madhya Pradesh (85) is higher than that of the poorest regions of the world such as the African countries. Government also needs to pay attention to aspects of human development such as availability of safe drinking water, housing facilities for the poor and food and nutrition. It is also the duty of the government to take care of the poorest and most ignored regions of the country through increased spending in such areas.

### SUMMING UP

In this chapter we have looked at ways of classifying economic activities into some meaningful groups. One way of doing this is to examine whether the activity relates to the primary, secondary or tertiary sectors. The data for India, for the last thirty years, shows that while goods and services produced in the tertiary sector contribute the most to GDP, the employment remains in the primary sector. We have also seen what all can be done for increasing employment opportunities in the country. Another classification is to consider whether people are working in organised or unorganised sectors. Most people are working in the unorganised sectors and protection is necessary for them. We also looked at the difference between private and public activities, and why it is important for public activities to focus on certain areas.

**Important Terms Final Product:** It is the goods which are ready for consumption and are called final product, for example, bread which is ready for consumption.

**Intermediate:** All goods which are used as raw material for further production of goods, or for resale in the same year are known as intermediate goods. For example, flour which will be used for production of bread, so flour is an intermediate product. **G.D.P. (Gross Domestic Product):** It is the value of only final goods and services produced within the domestic territory of a country. **Unemployment:** When the person is willing to work at the prevailing wage rate but he/she is not getting a job it is called unemployment. **Seasonal**

**Unemployment:** The unemployment which generates due to the variation in season is called seasonal unemployment. It is mostly seen in agricultural sector. **Disguised**

**Unemployment:** When more people are working than its requirement then it is called disguised unemployment. So, even if we remove few people from the job, the process of production will not be affected, it is also called underemployment. **MNREGA:** Mahatma Gandhi National Rural Employment Guarantee Act, 2005. It will provide 100 days assured employment to all needy and unemployed workers. If they are unable to provide employment then they would **Organized sector:** People have assured work and terms of employment are regular. Rules and regulations given in various laws are registered by the government.

**Unorganized sector:** It consists of small and scattered units which are not in the control of the government. It has low pay and unsecured jobs.

## Chapter 3 Money And Credit

### Money as a Medium of Exchange

Have you ever wondered why transactions are made in money? The reason is simple. A person holding money can easily exchange it for any commodity or service that he or she might want. Take the case of a shoe manufacturer. He wants to sell shoes in the market and buy wheat. The shoe manufacturer will first exchange shoes that he has produced for money, and then exchange the money for wheat. Imagine how much more difficult it would be if the shoe manufacturer had to directly exchange shoes for wheat without the use of money. He would have to look for a wheat growing farmer who not only wants to sell wheat but also wants to buy the shoes in exchange.

That is, both parties have to agree to sell and buy each others commodities. This is known as **double coincidence of wants**. What a person desires to sell is exactly what the other wishes to buy. In a barter system where goods are directly exchanged without the use of money, double coincidence of wants is an essential feature.

In contrast, in an economy where money is in use, money by providing the crucial intermediate step eliminates the need for double coincidence of wants. It is no longer necessary for the shoe manufacturer to look for a farmer who will buy his shoes and at the same time sell him wheat. All he has to do is find a buyer for his shoes. Once he has exchanged his shoes for money, he can purchase wheat or any other commodity in the market. Since money acts as an intermediate in the exchange process, it is called a **medium of exchange**.

### MODERN FORMS OF MONEY

We have seen that money is something that can act as a medium of exchange in transactions. Before the introduction of coins, a variety of objects was used as money. For example, since the very early ages, Indians used grains and cattle as money. Thereafter came the use of metallic coins — gold, silver, copper coins — a phase which continued well into the last century.

### Currency

Modern forms of money include currency — paper notes and coins. Unlike the things that were used as money earlier, modern currency is not made of precious metal such as gold, silver and copper. And unlike grain and cattle, they are neither of everyday use. The modern currency is without any use of its own.

Then, why is it accepted as a medium of exchange? It is accepted as a medium of exchange because the currency is authorised by the government of the country.

In India, the Reserve Bank of India issues currency notes on behalf of the central government. As per Indian law, no other individual or organisation is allowed to issue currency. Moreover, the law legalises the use of rupee as a medium of payment that cannot be refused in settling transactions in India. No individual in India can legally refuse a payment made in rupees. Hence, the rupee is widely accepted as a medium of exchange.

### Deposits with Banks

The other form in which people hold money is as deposits with banks. Banks accept the deposits and also pay an amount as interest on the deposits. In this way people's money is safe with the banks and it earns an amount as interest. People also have the provision to withdraw the money as and when they require. Since



the deposits in the bank accounts can be withdrawn on demand, these deposits are called demand deposits. Demand deposits offer another interesting facility. It is this facility which lends it the essential characteristics of money (that of a medium of exchange). You would have heard of payments being made by cheques instead of cash. For payment through cheque, the payer who has an account with the bank, makes out a cheque for a specific amount. A cheque is a paper instructing the bank to pay a specific amount from the person's account to the person in whose name the cheque has been issued.

Thus we see that demand deposits share the essential features of money. The facility of cheques against demand deposits makes it possible to directly settle payments without the use of cash. Since demand deposits are accepted widely as a means of payment, along with currency, they constitute money in the modern economy.

The modern forms of money — currency and deposits — are closely linked to the working of the modern banking system.

### LOAN ACTIVITIES OF BANKS

Let us take the story of banks further. Banks keep only a small proportion of their deposits as cash with themselves. For example, banks in India these days hold about 15 per cent of their deposits as cash. This is kept as provision to pay the depositors who might come to withdraw money from the bank on any given day. Since, on any particular day, only some of its many depositors come to withdraw cash, the bank is able to manage with this cash.

*What do you think would happen if all the depositors went to ask for their money at the same time?*

Banks use the major portion of the deposits to extend loans. There is a huge demand for loans for various economic activities. Banks make use of the deposits to meet the loan requirements of the people. In this way, banks mediate between those who have surplus funds (the depositors) and those who are in need of these funds (the borrowers). Banks charge a higher interest rate on loans than what they offer on deposits. The difference between what is charged from borrowers and what is paid to depositors is their main source of income.

### TWO DIFFERENT CREDIT SITUATIONS

(1) A large number of transactions in our day-to-day activities involve credit in some form or the other. Sometimes it required to meet the working capital needs of production. The credit helps to meet the ongoing expenses of production, complete production on time, and thereby increase the earnings. **Credit therefore plays a vital and positive role in this situation.**

(2) In rural areas, the main demand for credit is for crop production. Crop production involves considerable costs on seeds, fertilisers, pesticides, water, electricity, repair of equipment, etc. There is a minimum stretch of three to four months between the time when the farmers buy these inputs and when they sell the crop. Farmers usually take crop loans at the beginning of the season and repay the loan after harvest. Repayment of the loan is crucially dependent on the income from farming.

In case, the failure of the crop made loan repayment impossible. Farmers had to sell part of the land to repay the loan. Credit, instead of helping left situation worse off. This is an example of what is commonly called debt-

trap. **Credit in this case pushes the borrower into a situation from which recovery is very painful.**

In one situation credit helps to increase earnings and therefore the person is better off than before. In another situation, because of the crop failure, credit pushes the person into a debt trap. Whether credit would be useful or not, therefore, depends on the risks in the situation and whether there is some support, in case of loss.

### TERMS OF CREDIT

Every loan agreement specifies an interest rate which the borrower must pay to the lender along with the repayment of the principal. In addition, lenders may demand collateral (security) against loans. **Collateral is an asset that the borrower owns (such as land, building, vehicle, livestock, deposits with banks) and uses this as a guarantee to a lender until the loan is repaid.** If the borrower fails to repay the loan, the lender has the right to sell the asset or collateral to obtain payment. Property such as land titles, deposits with banks, livestock are some common examples of collateral used for borrowing.

### Loans from Cooperatives

Besides banks, the other major source of cheap credit in rural areas are the cooperative societies (or cooperatives). Members of a cooperative pool their resources for cooperation in certain areas. There are several types of cooperatives possible such as farmers cooperatives, weavers cooperatives, industrial workers cooperatives, etc. For example 'Krishak Cooperative' functions in a village. It has 2300 farmers as members. It accepts deposits from its members. With these deposits as collateral, the Cooperative has obtained a large loan from the bank. These funds are used to provide loans to members. Once these loans are repaid, another round of lending can take place.

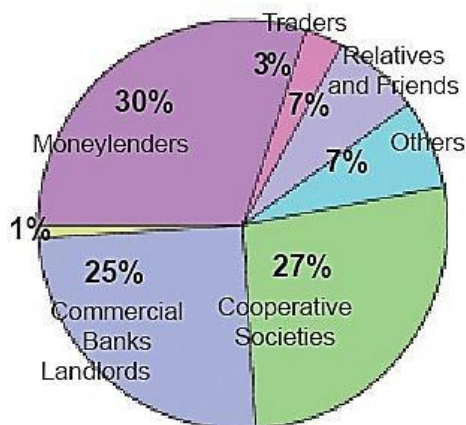
Krishak Cooperative provides loans for the purchase of agricultural implements, loans for cultivation and agricultural trade, fishery loans, loans for construction of houses and for a variety of other expenses.

### FORMAL SECTOR CREDIT IN INDIA

We have seen in the above examples that people obtain loans from various sources. The various types of loans can be conveniently grouped **as formal sector loans** and **informal sector loans**. Among the former are loans from banks and cooperatives. The informal lenders include moneylenders, traders, employers, relatives and friends, etc.

*In Graph 1 you can see the various sources of credit to rural households in India. Is more credit coming from the formal sector or the informal sector?*

**Graph 1 : Sources of Credit for Rural Households in India in 2003**



The Reserve Bank of India supervises the functioning of formal sources of loans. For instance, we have seen that the banks maintain a minimum cash balance out of the deposits they receive. The RBI monitors the banks in actually maintaining cash balance. Similarly, the RBI sees that the banks give loans not just to profit-making businesses and traders but also to small cultivators, small scale industries, to small borrowers etc. Periodically, banks have to submit information to the RBI on how much they are lending, to whom, at what interest rate, etc.

There is no organisation which supervises the credit activities of lenders in the informal sector. They can lend at whatever interest rate they choose. There is no one to stop them from using unfair means to get their money back.

Compared to the formal lenders, most of the informal lenders charge a much higher interest on loans. Thus, the cost to the borrower of informal loans is much higher.

Higher cost of borrowing means a larger part of the earnings of the borrowers is used to repay the loan. Hence, borrowers have less income left for themselves. In certain cases, the high interest rate for borrowing can mean that the amount to be repaid is greater than the income of the borrower. This could lead to increasing debt and debt trap. Also, people who might wish to start an enterprise by borrowing may not do so because of the high cost of borrowing.

For these reasons, banks and cooperative societies need to lend more. This would lead to higher incomes and many people could then borrow cheaply for a variety of needs. They could grow crops, do business, set up small-scale industries etc. They could set up new industries or trade in goods. **Cheap and affordable credit is crucial for the country's development.**

#### **Formal And Informal Credit: Who gets what?**

In Urban areas 85 per cent of the loans taken by poor households in the urban areas are from informal sources. Only 10 per cent of their loans are from informal sources, while 90 per cent are from formal sources. A similar pattern is also found in rural areas. The rich households are availing cheap credit from formal lenders whereas the poor households have to pay a large amount for borrowing.

What does all this suggest? First, the formal sector still meets only about half of the total credit needs of the rural people. The remaining credit needs are met from informal sources. Most loans from informal lenders

carry a very high interest rate and do little to increase the income of the borrowers. **Thus, it is necessary that banks and cooperatives increase their lending particularly in the rural areas, so that the dependence on informal sources of credit reduces. Secondly, while formal sector loans need to expand, it is also necessary that everyone receives these loans.** At present, it is the richer households who receive formal credit whereas the poor have to depend on the informal sources. It is important that the formal credit is distributed more equally so that the poor can benefit from the cheaper loans.

#### **Differences between Formal and Informal Sources of Credit.**

Formal Sector Credit	Informal Sector Credit
(i) Includes banks and cooperatives.	Includes moneylenders, traders, employees, friends and relatives.
(ii) Banks require collateral and proper documentation for getting a loan.	Repeated borrowing can lead to debt trap.
(iii) A reasonable rate of interest is charged.	High rate of interest
(iv) Apart from profitmaking, they also have an objective of social welfare.	Their only motive is to extract profit as much as possible.
(v) Terms of credit are fair and reasonable.	They impose very tough and sometimes even unreasonable terms of credit on borrowers.
(vi) The Reserve Bank of India supervises its functioning.	Banks do not supervise.

#### **SELF-HELP GROUPS FOR THE POOR**

In the previous section we have seen that poor households are still dependent on informal sources of credit. Why is it so? Banks are not present everywhere in rural India. Even when they are present, getting a loan from a bank is much more difficult than taking a loan from informal sources. Bank loans require proper documents and collateral. Absence of collateral is one of the major reasons which prevents the poor from getting bank loans. Informal lenders such as moneylenders, on the other hand, know the borrowers personally and hence are often willing to give a loan without collateral. The borrowers can, if necessary, approach the moneylenders even without repaying their earlier loans. However, the moneylenders charge very high rates of interest, keep no records of the transactions and harass the poor borrowers.

In recent years, people have tried out some newer ways of providing loans to the poor. The idea is to organise rural poor, in particular women, into small Self Help Groups (SHGs) and pool (collect) their savings. A typical SHG has 15-20 members, usually belonging to one neighbourhood, who meet and save regularly. Saving per member varies from Rs 25 to Rs 100 or more, depending on the ability of the people to save. Members can take small loans from the group itself to meet their needs. The group charges interest on these loans but this is still less than what the moneylender charges. After a year or two, if the group is regular in savings, it becomes eligible for availing loan from the bank. Loan is sanctioned in the name of the group and is meant to create self-employment opportunities for the members. For instance, small loans are provided to the members for releasing mortgaged land, for meeting working

capital needs (e.g. buying seeds, fertilisers, raw materials like bamboo and cloth), for housing materials, for acquiring assets like sewing machine, handlooms, cattle, etc.

Most of the important decisions regarding the savings and loan activities are taken by the group members. The group decides as regards the loans to be granted — the purpose, amount, interest to be charged, repayment schedule etc. Also, it is the group which is responsible for the repayment of the loan. Any case of non-repayment of loan by any one member is followed up seriously by other members in the group. Because of this feature, banks are willing to lend to the poor women when organised in SHGs, even though they have no collateral as such.

Thus, the SHGs help borrowers overcome the problem of lack of collateral. They can get timely loans for a variety of purposes and at a reasonable interest rate. Moreover, SHGs are the building blocks of organisation of the rural poor. Not only does it help women to become financially self-reliant, the regular meetings of the group provide a platform to discuss and act on a variety of social issues such as health, nutrition, domestic violence, etc.

### Grameen Bank of Bangladesh

*Grameen Bank of Bangladesh is one of the biggest success stories in reaching the poor to meet their credit needs at reasonable rates. Started in the 1970s as a small project, Grameen Bank now has over 6 million borrowers in about 40,000 villages spread across Bangladesh. Almost all of the borrowers are women and belong to poorest sections of the society. These borrowers have proved that not only are poor women reliable borrowers, but that they can start and run a variety of small income-generating activities successfully. Professor Muhammad Yunus, The Founder of Grameen Bank, and recipient of 2006 Nobel Prize for Peace*

“If credit can be made available to the poor people on terms and conditions that are appropriate and reasonable these millions of small people with their millions of small pursuits can add up to create the biggest development wonder.”

### SUMMING UP

In this chapter we have looked at the modern forms of money and how they are linked with the banking system. On one side are the depositors who keep their money in the banks and on the other side are the borrowers who take loans from these banks. Economic activities require loans or credit. Credit, as we saw can have a positive impact, or in certain situations make the borrower worse off.

Credit is available from a variety of sources. These can be either formal sources or informal sources. Terms of credit vary substantially between formal and informal lenders. At present, it is the richer households who receive credit from formal sources whereas the poor have to depend on the informal sources. It is essential that the total formal sector credit increases so that the dependence on the more expensive informal credit becomes less. Also, the poor should get a much greater share of formal loans from banks, cooperative societies etc. Both these steps are important for development.

**Important Terms** **Barter System:** Barter refers to the direct exchange of goods and services. In this way, barter system refers to that **Money:** Money may be anything chosen by common consent as a medium of exchange. It can be in the form of coins and bank notes; coins and bank notes collectively. **Cheque:** A cheque is a paper instructing the

banks in writing to pay a specific amount from the person's account to the person in whose name the cheque has been issued. **Reserve Bank of India:** The Reserve Bank of India is the only legal authority that can issue currency notes and coins on behalf of the central government. **Investment:** Investment is the amount of money spent with the intention of earning income at regular intervals (in the form of return from funds invested) or in the long run (in the form of capital appreciation). **Credit:** Credit means giving money on loan to needy persons. **Financial Formal Institutions:** Commercial banks, cooperatives and the regional rural banks are the formal institutions of credit. **Financial Informal Institutions:** The informal framework for deployment of credit and savings in India comprises the local moneylenders, landlords, self-help groups, chit fund, employers, relative, friends and private finance companies. **Collateral:** Collateral is the security provided by a borrower (such as land, building, vehicle, livestock, deposits with banks) against a loan, and it can be sold in case of non-payment. **APS:** APS stands for Average Propensity to Save. **Fiat Money:** State issued money which is neither legally convertible to any other thing nor fixed in value in terms of any objective standard. **Fiduciary Money:** Money which is accepted on the basis of the trust that the issuer commands is called fiduciary money. **Fixed Deposits:** These are deposits for a fixed term varying from a frequency of a few days to a few years. **Actual Investment:** The actual amount of investment is called an actual investment. **Deferred Payments:** Payments which are to be made in the future are known as deferred payments. **Token coins:** Token coins are the coins where value as money is far above the value of metal contained in. **Short-term loans:** Loans given for a short period of time are known as short-term loans.

## Chapter 4 Globalisation And The Indian Economy

As consumers in today's world, some of us have a wide choice of goods and services before us. The latest models of digital cameras, mobile phones and televisions made by the leading manufacturers of the world are within our reach.

Such wide-ranging choice of goods in our markets is a relatively recent phenomenon. You wouldn't have found such a wide variety of goods in Indian markets even two decades back. In a matter of years, our markets have been transformed.

How do we understand these rapid transformations? What are the factors that are bringing about these changes? And, how are these changes affecting the lives of the people? We shall dwell on these questions in this chapter.

### Production Across Countries

Until the middle of the twentieth century, production was largely organised within countries. What crossed the boundaries of these countries were raw materials, food stuff and finished products. Colonies such as India exported raw materials and food stuff and imported finished goods. Trade was the main channel connecting distant countries. This was before large companies called multinational corporations (MNCs) emerged on the scene. A MNC is a company that owns or controls production in more than one nation. MNCs set up offices and factories for production in regions where they can get cheap labour and other resources. This is done so that the cost of production is low and the MNCs can earn greater profits. Consider the following example.

### Spreading of Production by an MNC

A large MNC, producing industrial equipment, designs its products in research centres in the United States, and



then has the components manufactured in China. These are then shipped to Mexico and Eastern Europe where the products are assembled and the finished products are sold all over the world. Meanwhile, the company's customer care is carried out through call centres located in India.

In this example the MNC is not only selling its finished products globally, but more important, the goods and services are produced globally. As a result, production is organised in increasingly complex ways. The production process is divided into small parts and spread out across the globe. In the above example, China provides the advantage of being a cheap manufacturing location. Mexico and Eastern Europe are useful for their closeness to the markets in the US and Europe. India has highly skilled engineers who can understand the technical aspects of production. It also has educated English speaking youth who can provide customer care services. And all this probably can mean 50-60 per cent cost-savings for the MNC. The advantage of spreading out production across the borders to the multinationals can be truly immense.

### Interlinking Production Across Countries

In general, MNCs set up production where it is close to the markets; where there is skilled and unskilled labour available at low costs; and where the availability of other factors of production is assured. In addition, MNCs might look for government policies that look after their interests. You will read more about the policies later in the chapter.

Having assured themselves of these conditions, MNCs set up factories and offices for production. The money that is spent to buy assets such as land, building, machines and other equipment is called investment. Investment made by MNCs is called foreign investment. Any investment is made with the hope that these assets will earn profits.

At times, MNCs set up production jointly with some of the local companies of these countries. The benefit to the local company of such joint production is two-fold. First, MNCs can provide money for additional investments, like buying new machines for faster production. Second, MNCs might bring with them the latest technology for production.

But the most common route for MNC investments is to buy up local companies and then to expand production. MNCs with huge wealth can quite easily do so. To take an example, Cargill Foods, a very large American MNC, has bought over smaller Indian companies such as Parakh Foods. Parakh Foods had built a large marketing network in various parts of India, where its brand was well-reputed. Also, Parakh Foods had four oil refineries, whose control has now shifted to Cargill. Cargill is now the largest producer of edible oil in India, with a capacity to make 5 million pouches daily.

In fact, many of the top MNCs have wealth exceeding the entire budgets of the developing country governments. With such enormous wealth, imagine the power and influence of these MNCs.

There's another way in which MNCs control production. Large MNCs in developed countries place orders for production with small producers. Garments, footwear, sports items are examples of industries where production is carried out by a large number of small producers around the world. The products are supplied to the MNCs, which then sell these under their own brand names to the customers. These large MNCs have tremendous power to determine price, quality, delivery, and labour conditions for these distant producers.

Thus, we see that there are a variety of ways in which the MNCs are spreading their production and interacting with local producers in various countries across the globe. By setting up partnerships with local companies, by using the local companies for supplies, by closely competing with the local companies or buying them up, MNCs are exerting a strong influence on production at these distant locations. As a result, **production in these widely dispersed locations is getting interlinked.**

### Foreign Trade and Integration of Markets

For a long time foreign trade has been the main channel connecting countries. In history you would have read about the trade routes connecting India and South Asia to markets both in the East and West and the extensive trade that took place along these routes. Also, you would remember that it was trading interests which attracted various trading companies such as the East India Company to India. What then is the basic function of foreign trade?

To put it simply, foreign trade creates an opportunity for the producers to reach beyond the domestic markets, i.e., markets of their own countries. Producers can sell their produce not only in markets located within the country but can also compete in markets located in other countries of the world. Similarly, for the buyers, import of goods produced in another country is one way of expanding the choice of goods beyond what is domestically produced.

Let us see the effect of foreign trade through the example of Chinese toys in the Indian markets.

### Chinese Toys in India

*Chinese manufacturers learn of an opportunity to export toys to India, where toys are sold at a high price. They start exporting plastic toys to India. Buyers in India now have the option of choosing between Indian and the Chinese toys. Because of the cheaper prices and new designs, Chinese toys become more popular in the Indian markets. Within a year, 70 to 80 per cent of the toy shops have replaced Indian toys with Chinese toys. Toys are now cheaper in the Indian markets than earlier.*

*What is happening here? As a result of trade, Chinese toys come into the Indian markets. In the competition between Indian and Chinese toys, Chinese toys prove better. Indian buyers have a greater choice of toys and at lower prices. For the Chinese toy makers, this provides an opportunity to expand business. The opposite is true for Indian toy makers. They face losses, as their toys are selling much less. Small traders of readymade garments facing stiff competition from both the MNC brands and imports.*

In general, with the opening of trade, goods travel from one market to another. Choice of goods in the markets rises. Prices of similar goods in the two markets tend to become equal. And, producers in the two countries now closely compete against each other even though they are separated by thousands of miles. **Foreign trade thus results in connecting the markets or integration of markets in different countries.**

### What is Globalisation?

In the past two to three decades, more and more MNCs have been looking for locations around the world which would be cheap for their production. Foreign investment by MNCs in these countries has been rising. At the same time, foreign trade between countries has been rising rapidly. A large part of the foreign trade is also controlled by MNCs. For instance, the car

manufacturing plant of Ford Motors in India not only produces cars for the Indian markets, it also exports cars to other developing countries and exports car components for its many factories around the world. Likewise, activities of most MNCs involve substantial trade in goods and also services.

The result of greater foreign investment and greater foreign trade has been greater integration of production and markets across countries. **Globalisation is this process of rapid integration or interconnection between countries.** MNCs are playing a major role in the globalisation process.

**More and more goods and services, investments and technology are moving between countries.**

Most regions of the world are in closer contact with each other than a few decades back. Besides the movements of goods, services, investments and technology, there is one more way in which the countries can be connected. This is through the movement of people between countries. People usually move from one country to another in search of better income, better jobs or better education. In the past few decades, however, there has not been much increase in the movement of people between countries due to various restrictions.

### **FACTORS THAT HAVE ENABLED GLOBALISATION**

**Technology** Rapid improvement in technology has been one major factor that has stimulated the globalisation process. For instance, the past fifty years have seen several improvements in transportation technology. This has made much faster delivery of goods across long distances possible at lower costs.

#### **Containers for transport of goods**

Goods are placed in containers that can be loaded intact onto ships, railways, planes and trucks. Containers have led to huge reduction in port handling costs and increased the speed with which exports can reach markets. Similarly, the cost of air transport has fallen. This has enabled much greater volumes of goods being transported by airlines.

Even more remarkable have been the developments in **information and communication technology.** In recent times, technology in the areas of telecommunications, computers, Internet has been changing rapidly. Telecommunication facilities (telegraph, telephone including mobile phones, fax) are used to contact one another around the world, to access information instantly, and to communicate from remote areas. This has been facilitated by satellite communication devices. As you would be aware, computers have now entered almost every field of activity. You might have also ventured into the amazing world of internet, where you can obtain and share information on almost anything you want to know. Internet also allows us to send instant electronic mail (e-mail) and talk (voice-mail) across the world at negligible costs.

Information and communication technology (or IT in short) has played a major role in spreading out **production of services** across countries. Let us see how.

#### **Using IT in Globalisation**

A news magazine published for London readers is to be designed and printed in Delhi. The text of the magazine is sent through Internet to the Delhi office. The designers in the Delhi office get orders on how to design the magazine from the office in London using telecommunication facilities. The

designing is done on a computer. After printing, the magazines are sent by air to London. Even the payment of money for designing and printing from a bank in London to a bank in Delhi is done instantly through the Internet (e-banking)

### **Liberalisation of foreign trade and foreign investment policy**

Let us return to the example of imports of Chinese toys in India. Suppose the Indian government puts a tax on import of toys. What would happen? Those who wish to import these toys would have to pay tax on this.

Because of the tax, buyers will have to pay a higher price on imported toys. Chinese toys will no longer be as cheap in the Indian markets and imports from China will automatically reduce. Indian toy-makers will prosper.

Tax on imports is an example of **trade barrier.** It is called a barrier because some restriction has been set up. Governments can use trade barriers to increase or decrease (regulate) foreign trade and to decide what kinds of goods and how much of each, should come into the country.

The Indian government, after Independence, had put barriers to foreign trade and foreign investment. This was considered necessary to protect the producers within the country from foreign competition. Industries were just coming up in the 1950s and 1960s, and competition from imports at that stage would not have allowed these industries to come up. Thus, India allowed imports of only essential items such as machinery, fertilisers, petroleum etc. Note that all developed countries, during the early stages of development, have given protection to domestic producers through a variety of means.

Starting around 1991, some far-reaching changes in policy were made in India. The government decided that the time had come for Indian producers to compete with producers around the globe. It felt that competition would improve the performance of producers within the country since they would have to improve their quality. This decision was supported by powerful international organisations.

Thus, barriers on foreign trade and foreign investment were removed to a large extent. This meant that goods could be imported and exported easily and also foreign companies could set up factories and offices here.

### **Removing barriers or restrictions set by the government is what is known as liberalisation.**

With liberalisation of trade, businesses are allowed to make decisions freely about what they wish to import or export. The government imposes much less restrictions than before and is therefore said to be more liberal.

### **WORLD TRADE ORGANISATION**

We have seen that the liberalisation of foreign trade and investment in India was supported by some very powerful international organisations. These organisations say that all barriers to foreign trade and investment are harmful. There should be no barriers. Trade between countries should be 'free'. All countries in the world should liberalise their policies. World Trade Organisation (WTO) is one such organisation whose aim is to liberalise international trade. Started at the initiative of the developed countries, WTO establishes rules regarding international trade, and sees that these rules are obeyed. Nearly 150 countries of the world are currently members of the WTO (2006).

Though WTO is supposed to allow free trade for all, in practice, it is seen that the developed countries have

unfairly retained trade barriers. On the other hand, WTO rules have forced the developing countries to remove trade barriers. An example of this is the current debate on trade in agricultural products.

### Debate on Trade Practices

*You have seen in Chapter 2, that the agriculture sector provides the bulk of employment and a significant portion of the GDP in India. Compare this to a developed country such as the US with the share of agriculture in GDP at 1% and its share in total employment a tiny 0.5%. And yet this very small percentage of people who are engaged in agriculture in the US receive massive sums of money from the US government for production and for exports to other countries. Due to this massive money that they receive, US farmers can sell the farm products at abnormally low prices. The surplus farm products are sold in other country markets at low prices, adversely affecting farmers in these countries.*

*Developing countries are, therefore, asking the developed country governments, "We have reduced trade barriers as per WTO rules. But you have ignored the rules of WTO and have continued to pay your farmers vast sums of money. You have asked our governments to stop supporting our farmers, but you are doing so yourselves. Is this free and fair trade?"*

### IMPACT OF GLOBALISATION IN INDIA

In the last fifteen years, globalisation of the Indian economy has come a long way. What has been its effect on the lives of people? Let us look at some of the evidence.

Globalisation and greater competition among producers - both local and foreign producers - has been of advantage to consumers, particularly the well-off sections in the urban areas. There is greater choice before these consumers who now enjoy improved quality and lower prices for several products. As a result, these people today, enjoy much higher standards of living than was possible earlier.

Among producers and workers, the impact of globalisation has not been uniform.

Firstly, **MNCs** have increased their investments in India over the past 15 years, which means investing in India has been beneficial for them. MNCs have been interested in industries such as cell phones, automobiles, electronics, soft drinks, fast food or services such as banking in urban areas. These products have a large number of well-off buyers. In these industries and services, new jobs have been created. Also, local companies supplying raw materials, etc. to these industries have prospered.

### Steps to Attract Foreign Investment

In recent years, the central and state governments in India are taking special steps to attract foreign companies to invest in India. Industrial zones, called Special Economic Zones (SEZs), are being set up. SEZs are to have world class facilities: electricity, water, roads, transport, storage, recreational and educational facilities. Companies who set up production units in the SEZs do not have to pay taxes for an initial period of five years.

Government has also allowed **flexibility** in the labour laws to attract foreign investment. You have seen in Chapter 2 that the companies in the organised sector have to obey certain rules that aim to protect the workers' rights. In the recent years, the government has allowed companies to ignore many of these. Instead of hiring workers on a regular basis, companies hire workers 'flexibly' for short periods when there is intense

pressure of work. This is done to reduce the cost of labour for the company. However, still not satisfied, foreign companies are demanding more flexibility in labour laws.

Secondly, several of the **top Indian companies** have been able to benefit from the increased competition. They have invested in newer technology and production methods and raised their production standards. Some have gained from successful collaborations with foreign companies.

Moreover, globalisation has enabled some large Indian companies to emerge as multinationals themselves Tata Motors (auto-mobiles), Infosys (IT), Ranbaxy (medicines), Asian Paints (paints), Sundaram Fasteners (nuts and bolts) are some Indian companies which are spreading their operations worldwide.

Globalisation has also created new opportunities for companies providing services, particularly those involving IT. The Indian company producing a magazine for the London based company and call centres are some examples. Besides, a host of services such as data entry, account-ing, administrative tasks, engineering are now being done cheaply in countries such as India and are exported to the developed countries.

### Small producers: Compete or perish

For a large number of small producers and workers globalisation has posed major challenges.

### Rising Competition

Ravi did not expect that he would have to face a crisis in such a short period of his life as industrialist. Ravi took a loan from the bank to start his own company producing capacitors in 1992 in Hosur, an industrial town in Tamil Nadu. Capacitors are used in many electronic home appliances including tube lights, television etc. Within three years, he was able to expand production and had 20 workers working under him.

His struggle to run his company started when the government removed restrictions on imports of capacitors as per its agreement at WTO in 2001. His main clients, the television companies, used to buy different components including capacitors in bulk for the manufacture of television sets. However, competition from the MNC brands forced the Indian television companies to move into assembling activities for MNCs. Even when some of them bought capacitors, they would prefer to import as the price of the imported item was half the price charged by people like Ravi. Ravi now produces less than half the capacitors that he produced in the year 2000 and has only seven workers working for him. Many of Ravi's friends in the same business in Hyderabad and Chennai have closed their units.

Batteries, capacitors, plastics, toys, tyres, dairy products, and vegetable oil are some examples of industries where the small manufacturers have been hit hard due to competition. Several of the units have shut down rendering many workers jobless. The small industries in India employ the largest number of workers (20 million) in the country, next only to agriculture.

### Competition and Uncertain Employment

Globalisation and the pressure of competition have substantially changed the lives of workers. Faced with growing competition, most employers these days prefer to employ workers 'flexibly'. This means that workers' jobs are no longer secure.

Let us see how the workers in the garment export industry in India are having to bear this pressure of competition.



Large MNCs in the garment industry in Europe and America order their products from Indian exporters. These large MNCs with worldwide network look for the cheapest goods in order to maximise their profits. To get these large orders, Indian garment exporters try hard to cut their own costs. As cost of raw materials cannot be reduced, exporters try to cut labour costs. Where earlier a factory used to employ workers on a permanent basis, now they employ workers only on a temporary basis so that they do not have to pay workers for the whole year. Workers also have to put in very long working hours and work night shifts on a regular basis during the peak season. Wages are low and workers are forced to work overtime to make both ends meet.

While this competition among the garment exporters has allowed the MNCs to make large profits, workers are denied their fair share of benefits brought about by globalisation.

### THE STRUGGLE FOR A FAIR GLOBALISATION

The above evidence indicates that not everyone has benefited from globalisation. People with education, skill and wealth have made the best use of the new opportunities. On the other hand, there are many people who have not shared the benefits. Since globalisation is now a reality, the question is how to make globalisation more 'fair'?

Fair globalisation would create opportunities for all, and also ensure that the benefits of globalisation are shared better. The government can play a major role in making this possible. Its policies must protect the interests, not only of the rich and the powerful, but all the people in the country. You have read about some of the possible steps that the government can take. For instance, the government can ensure that labour laws are properly implemented and the workers get their rights. It can support small producers to improve their performance till the time they become strong enough to compete. If necessary, the government can use trade and investment barriers. It can negotiate at the WTO for 'fairer rules'. It can also align with other developing countries with similar interests to fight against the domination of developed countries in the WTO. In the past few years, massive campaigns and representation by people's organisations have influenced important decisions relating to trade and investments at the WTO. This has demonstrated that people also can play an important role in the struggle for fair globalisation.

### SUMMING UP

In this chapter, we looked at the present phase of globalisation. Globalisation is the process of rapid integration of countries. This is happening through greater foreign trade and foreign investment. MNCs are playing a major role in the globalisation process. More and more MNCs are looking for locations around the world that are cheap for their production. As a result, production is being organised in complex ways. Technology, particularly IT, has played a big role in organising production across countries. In addition, liberalisation of trade and investment has facilitated globalisation by removing barriers to trade and investment. At the inter-national level, WTO has put pressure on developing countries to liberalise trade and investment.

While globalisation has benefited well-off consumers and also producers with skill, education and wealth, many small producers and workers have suffered as a result of the rising competition. Fair globalisation would create opportunities for all, and also ensure that the

benefits of globalisation are shared better.

**Important Terms Globalisation:** Globalisation describes a process by which national and regional economies, societies, and cultures have become integrated through the global network of trade, communication, immigration and transportation. **Planning Commission:** The Planning Commission was an institution in the Government of India, which formulated India's Five-Year Plans, among other functions. **Multinational Corporations (MNCs):** An enterprise operating in several countries, but managed from one (home) country. Generally, any company or group that derives a quarter of its revenue from operations outside of its home country is considered a multinational corporation. **MRTPA:** MRTPA stands for Monopolies and Restrictive Trade Practices Act. It was an act following the recommendations of Monopoly Inquiry Committee and was passed in 1970. **World Bank:** World Bank is an international financial institution that extends financial assistance to their member countries for development purposes. **Export Quotas:** It means the fixing of the maximum quantity of commodity that can be exported during a year. **Import Quotas:** It means fixing of the maximum quantity of a commodity that can be imported during a year. **Consumer:** An individual who buys products or services for personal use and not for manufacture or resale. **Liberalisation of Economy:** It means to free it from direct or physical controls imposed by the government. **World Trade Organization (WTO):** It is the only global international organization dealing with the rules of trade. **Special Economic Zones (SEZs):** It is an area in which business and trade laws are different from rest of the country. These are located within a country's national borders, and their aims include: increased trade, increased investment, job creation and effective administration. **Tariff:** A tax or duty to be paid on a particular class of imports or exports. **Labour Law:** It is the body of laws, administrative rulings, and precedents which address the legal rights of, and restrictions on, working people and their organizations. It is also called employment law.

## Chapter 5 Consumer Rights

In this chapter we will discuss the consumer rights, consumer movements, consumer awareness and other such issues related with consumers.

### The Consumer in the Marketplace

We participate in the market both as producers and consumers. As producers of goods and services we could be working in any of the sectors discussed earlier such as agriculture, industry, or services. Consumers participate in the market when they purchase goods and services that they need. These are the final goods that people as consumers use.

Rules and regulations are required for the protection of the consumers in the marketplace. Individual consumers often find themselves in a weak position. Whenever there is a complaint regarding a good or service that had been bought, the seller tries to shift all the responsibility on to the buyer. Their position usually is – "If you didn't like what you bought, please go elsewhere". As if the seller has no responsibility once a sale is completed. The consumer movement, as we shall discuss later, is an effort to change this situation.

*Exploitation in the marketplace happens in various ways.*

A consumer is said to be exploited when he/she is cheated by the producer or trader into buying lower quality or adulterated goods for more money. **A**

**consumer can be exploited in the following ways:**

(i) Shopkeepers weigh certain products lesser than they should. They may weigh only 7 kg and charge money for

10 kg. (ii) Sometimes traders add hidden charges. (iii) The shopkeeper may sell defective and/or adulterated goods. (iv) False information is given to attract consumers. For example, a company claimed that its powder milk was scientifically proven to be beneficial for babies and sold it in the market for years. However, it was later discovered that those were false claims and that the powder milk had never been certified by experts. (v) Traders and producers might sometimes hoard goods and create an artificial scarcity in the market and then sell those hoarded goods at higher prices.

### Consumer Movement

The consumer movement arose out of dissatisfaction of the consumers as many unfair practices were being indulged in by the sellers. There was no legal system available to consumers to protect them from exploitation in the marketplace. For a long time, when a consumer was not happy with a particular brand product or shop, he or she generally avoided buying that brand product, or would stop purchasing from that shop. It was presumed that it was the responsibility of consumers to be careful while buying a commodity or service. It took many years for organisations in India, and around the world, to create awareness amongst people. This has also shifted the responsibility of ensuring quality of goods and services on the sellers. In India, the consumer movement as a 'social force' originated with the necessity of protecting and promoting the interests of consumers against unethical and unfair trade practices. Rampant food shortages, hoarding, black marketing, adulteration of food and edible oil gave birth to the consumer movement in an organised form in the 1960s. Till the 1970s, consumer organisations were largely engaged in writing articles and holding exhibitions. They formed consumer groups to look into the malpractices. More recently, India witnessed an upsurge in the number of consumer groups.

Because of all these efforts, the movement succeeded in bringing pressure on business firms as well as government to correct business conduct which may be unfair and against the interests of consumers at large. A major step taken in 1986 by the Indian government was the enactment of the Consumer Protection Act 1986, popularly known as COPRA. You will learn more about COPRA later.

### Consumers International

*In 1985 United Nations adopted the UN Guidelines for Consumer Protection. This was a tool for nations to adopt measures to protect consumers and for consumer advocacy groups to press their governments to do so. At the international level, this has become the foundation for consumer movement. Today, Consumers International has become an umbrella body of 240 organisations from over 100 countries.*

### CONSUMER RIGHTS

#### Information about goods and services

When you buy any commodity, you will find certain details given on the packing. These details are about ingredients used, price, batch number, date of manufacture, expiry date and the address of the manufacturer. When we buy medicines, on the packets, you might find 'directions for proper use' and information relating to side effects and risks associated with usage of that medicine. When you buy garments, you will find information on 'instructions for washing'. Why is it that rules have been made so that the

manufacturer displays this information? It is because consumers have the **right to be informed** about the particulars of goods and services that they purchase. Consumers can then complain and ask for compensation or replacement if the product proves to be defective in any manner. For example, if we buy a product and find it defective well within the expiry period, we can ask for a replacement. If the expiry period was not printed, the manufacturer would blame the shopkeeper and will not accept the responsibility. If people sell medicines that have expired severe action can be taken against them. Similarly, one can protest and complain if someone sells a good at more than the printed price on the packet. This is indicated by 'MRP' — maximum retail price. In fact consumers can bargain with the seller to sell at less than the MRP.

In recent times, the right to information has been expanded to cover various services provided by the Government. In October 2005, the Government of India enacted a law, popularly known as RTI (Right to Information) Act, which ensures its citizens all the information about the functions of government departments. The effect of the RTI Act can be understood from the following case.

#### When choice is denied

Any consumer who receives a service in whatever capacity, regardless of age, gender and nature of service, has the **right to choose** whether to continue to receive the service.

Suppose you want to buy toothpaste, and the shop owner says that she can sell the toothpaste only if you buy a tooth brush. If you are not interested in buying the brush, your right to choice is denied. Similarly, sometimes gas supply dealers insist that you have to buy the stove from them when you take a new connection. In this way many a times you are forced to buy things that you may not wish to and you are left with no choice.

#### Where should consumers go to get justice?

These are some examples in which consumers are denied their rights. Such instances occur quite often in our country. Where should these consumers go to get justice?

Consumers have the **right to seek redressal** against unfair trade practices and exploitation. If any damage is done to a consumer, she has the right to get compensation depending on the degree of damage. There is a need to provide an easy and effective public system by which this can be done.

**COPRA:** Under COPRA, a three-tier quasi-judicial machinery at the district, state and national level was Set-up for redressal of consumer disputes. (i) The district level court deals with the cases involving claims upto Rs 20 lakhs, the state level courts between Rs 20 lakhs and Rs 1 crore and the national level court deals with cases involving claims exceeding Rs 1 crore. (ii) If a case is dismissed in district level court, the consumer can also appeal in the state court and then in National level courts. Thus, the Act has enabled us as consumers to have the right to represent in the consumer courts.

(iii) It strengthened the Consumer Movement and provided the consumers with the right to seek redressal against unfair trade practices and exploitation. If any damage is done to a consumer, she has the right to get compensation depending on the degree of damage. Thus, the Act has enabled us as consumers to have the

**right to represent** in the consumer courts.

### LEARNING TO BECOME WELL-INFORMED CONSUMERS

When we as consumers become conscious of our rights,

while purchasing various goods and services, we will be able to discriminate and make informed choices. This calls for acquiring the knowledge and skill to become a well-informed consumer. How do we become conscious of our rights? Look at the posters on the right and in the previous page. What do you think? The enactment of COPRA has led to the setting up of separate departments of Consumer Affairs in central and state governments. The posters that you have seen are one example through which government spread information about legal process which people can use. You might also be seeing such advertisements on television channels.

### ISI and Agmark

While buying many commodities, on the cover, you might have seen a logo with the letters ISI, Agmark or Hallmark. These logos and certification help consumers get assured of quality while purchasing the goods and services. The organisations that monitor and issue these certificates allow producers to use their logos provided they follow certain quality standards.

Though these organisations develop quality standards for many products, it is not compulsory for all the producers to follow standards. However, for some products that affect the health and safety of consumers or of products of mass consumption like LPG cylinders, food colours and additives, cement, packaged drinking water, it is mandatory on the part of the producers to get certified by these organisations.

**Important Terms Consumer Movement:** The Consumer Movement is an effort to promote consumer protection

through an organized social movement, which is in many places led by consumer organizations. **Consumer Awareness:** Consumer awareness is about making the consumer aware of his/her rights. The concept **Adulteration:** Adulteration usually refers to mixing other matter of an inferior and sometimes harmful quality with food or drink intended to be sold. **COPRA:** Consumer Protection Act was introduced by the Indian Government in 1986. Popularly known as COPRA, it has led to the setting up of a separate department of consumer affairs for the settlement of consumer's disputes. **Consumer Protection:** Consumer protection means protection of consumers from the mishappening due to technical and manufacturing fault of commodities by the manufactures. **Consumer Rights:** The rights which help the consumers in protecting himself from being exploited are known as consumer rights. **ISI and AGMARK:** ISI and AGMARK logos represent quality standard for many products. However, for some products that affect the health and safety of consumers such as LPG cylinders, food colours and additives, cement and packed drinking water, it is mandatory on the part of the producers to get certified by these organisations. **Hallmark:** Hallmark is quality certification for jewellery. This mark is issued by Indian Standards Institution whose headquarter is in New Delhi. **ISO certification:** At international level, International Organization for Standardization (ISO) whose headquarter is in Geneva (established in 1947) issues ISO certification which indicates companies, goods or institutions having this certification meet the specific level of standards. **National Consumer Day:** Consumer Protection Act was enacted on this day. **Black-Marketing:** Sellers generally hold up stocks in the market to create artificial scarcity so as to sell them later at higher rates.



# NCERT Class 12

## Introductory Macroeconomics

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 National Income And Related Aggregates

##### Topic-1 Macroeconomics with Basic Concepts and Circular Flow of Income Revision Notes

- Macroeconomics refers to that branch of economics that deals with economic problems or economic issues at the level of an economy as a whole. e.g. it deals with aggregates like national income, general price level, etc.
- **Consumption Goods:** Goods which are used by the consumers to satisfy human wants directly.
- **Capital Goods:** All goods which are used in the production of other goods either as fixed assets or as inventory stock are called Capital Goods.
- **Final Goods:** Those goods which are purchased either for final consumption by consumers (consumers goods) or for investment by producers (capital goods).
- **Intermediate Goods:** Those goods and services which are purchased as raw material for further production or for resale in the same year.
- **Stock:** Stock is a quantity measurable at a particular "point of time", e.g., wealth, assets, money, inventory, etc. A stock variable is nothing but an accumulated sum of flows.
- **Flow:** Flow is a quantity that can be measured over a specific "period of time". e.g., national income, change in stock, etc.
- **Gross Investment:** Total addition made to physical stock of capital during a period of time. It includes depreciation. It is also known as Gross Capital Formation.
- **Net Investment:** Net addition made to the real stock of capital during a period of time.
- **Depreciation:** It means fall in value of fixed capital goods due to normal wear and tear, expected obsolescence and efflux of time.
- **Circular flow of income:** Circular flow of income refers to the flow of activities of production, income generation and expenditure involving different sectors of the economy.
- **2-Sector Model of Circular Flow:** It is assumed that:
  - (i) Domestic economy comprises only 2 sectors, the producers and the households.
  - (ii) The households spend their entire income, so that there is no saving.
  - (iii) Domestic economy is a closed economy (no exports and imports).
  - (iv) There is no government in the economy.
- Production in the producing sector generates income for the households who are owners of the factors of production. Expenditure by the households generates demand for further production. These movements keep chasing each other continuously moving in a circle.
- **Significance of Circular Flow of Income:**
  - (1) It reflects structure of an economy,
  - (2) It shows interdependence among different sectors,
  - (3) It shows

injections and leakages from flow of money, (4) It helps in estimation of national income and related aggregates.

##### Topic-2 National Income: Concept and Methods of Calculating National Income & Related Aggregates Revision Notes

- **National Income:** National Income is the sum total of factor incomes earned by normal residents of a country.
- **Measurement of National Income:** In every economy, the circular flow of production, income and expenditure remains in operation continuously due to economic activities. Production generates income which creates demand and hence, expenditure. In this way, the national income of a country may be measured by three alternative methods. These are: (a) In the form of flow of goods and services, (b) In the form of income flow, (c) In the form of expenditure flow.
- **Value Added Method or Production Method:** Product Method or Valued Added Method is the method which measures the national income by estimating the contribution of each producing enterprise to produce in the domestic territory of the country in an accounting year. For measuring national income by this method, we have to estimate the following components:
  - **Net Domestic Product at Market Price (NDP<sub>MP</sub>):** Gross Valued Added by [Primary Sector + Secondary Sector + Tertiary Sector] - Depreciation.
  - **Net National Product at Factor Cost (NNP<sub>FC</sub>) or NI:**  $NNP_{FC} \text{ or } NI = NDP_{MP} - \text{Indirect Tax} + \text{Net Income from Abroad}$ .
  - **Value Added Method (Product Method):** Gross Value Added at Market Price ( $GV_{AMP}$ ) = Sales + Change in Stock - Intermediate Consumption.  $GDP_{MP} = GV_{AMP}$  of all sectors OR Value of output - Intermediate consumption  $NVA_{FC} = GV_{AMP} - \text{Depreciation} - NIT$
- **Precautions While Using Value Added Method: (i)** Intermediate Goods are not to be included in the national income since such goods are already included in the value of final goods. If they are included again, it will lead to double counting. **(ii)** Sale and purchase of second-hand goods is not included as they were included in the year in which they were produced and do not add to current flow of goods and services. However, any commission or brokerage on sale or purchase of such goods will be included in the national income as it is a productive service. **(iii)** Production of services for self-consumption or domestic services are not included. Domestic services like services of a housewife, kitchen gardening, etc. are not included in the national income since it is difficult to measure their market value. These services are produced and consumed at home and never enter the market place and are termed as non-market transactions. **(iv)** Production of goods for self-consumption will be included in the national income as they contribute to the current output. Their value is to be estimated or imputed as they are not sold in the market. **(v)** Imputed

value of owner-occupied houses should be included. People who live in their own houses, do not pay any rent. But, they enjoy housing services similar to those people who stay in rented houses. Therefore, value of such housing services is estimated according to market rent of similar accommodation. Such an estimated rent is known as imputed rent. **(vi)** Change in stock of goods will be included. Net increase in the stock of inventories will be included in the national income as it is a part of capital formation.

- **Income Method:** It measures national income in term of payments made in the form of wages, rent, interest and profit to the primary factors of production, *i.e.*, labour, land, capital and enterprise respectively for their productive services in an accounting year.

- **Net Domestic Income or Net Domestic Product at Factor Cost:** (1) Compensation to Employees + (2) Operating Surplus + (3) Mixed Income from Self Employment. National Income = Net Domestic Income + Net Income from Abroad.

- **Precautions While Using Income Method:** (i) Transfer incomes like scholarships, donations, charity, old age pensions, etc. are not included in the National income because such receipts are not connected with any productive activity and there is no value addition. (ii) Income from sale of second-hand goods will not be included in national income as their original sale has already been counted. If they are included again, it would lead to double counting. However, any brokerage or commission received by brokers or commission agents on sale of such goods will be included as it is an income received for rendering productive service. (iii) Income from sale of shares, bonds and debentures will not be included as such transactions do not contribute to current flow of goods and services. These financial assets are mere paper claims and involve a change of title only. However, any commission or brokerage on such financial assets is included as it is a productive service. (iv) Windfall gains like income from lotteries, horse race, etc. are not included as there is no productive activity connected with them. (v) Imputed value of services provided by owners of production units will be included. Imputed value of owner-occupied houses, interest on own capital, production for self-consumption, etc. will be included as these are productive activities and add to the flow of goods and services. (vi) Payments out of past savings like death duties, gift tax, wealth tax, etc. are not included in the national income because they are paid out of wealth or past savings and do not add to current flow of goods and services. Indirect taxes are not included in national income at factor cost. However, they are included in national income at market price.

- **Expenditure Method:** By this method, the total sum of expenditures on the purchase of final goods and services produced during an accounting year within an economy is estimated to obtain the value of GDP.

- **Final Expenditure:** It is the expenditure on the purchase of final goods and services, during an accounting year. It is broadly classified into four categories: (i) Private final consumption expenditure, (ii) Government final consumption expenditure, (iii) Investment expenditure, (iv) Net exports, *i.e.*, difference between exports and imports during an accounting year.

- Computation of National Income (by expenditure method)  $NNP_{FC} = GDP_{MP} - \text{Depreciation} + NFIA - \text{Net Indirect Tax}$ . Where,  $GDP_{MP} = \text{Private Final Consumption Expenditure} + \text{Government Final}$

$\text{Consumption Expenditure} + \text{Gross Domestic Capital Formation} + \text{Net Exports (Exports} - \text{Imports)}$ . Where,  $\text{Gross Domestic Capital Formation} = \text{Gross Domestic Fixed Capital Formation} + \text{Change in Stock (Closing Stock} - \text{Opening Stock)}$

- **Precautions While Using Expenditure Method:** (i)

Expenditure on intermediate goods will not be included in the national income as it is already included in the value of final expenditure. If it is included again, it will lead to double counting of expenditures. (ii) Transfer Payments are not included as such payments are not connected with any productive activity and there is no value addition. (iii) Purchase of second-hand goods will not be included as such expenditure has already been included when they were originally purchased. Such goods do not affect the current flow of goods and services. However, any commission or brokerage on such goods is included as it is a payment made for productive services. (iv) Purchase of financial assets (shares, debentures, bonds, etc.,) will not be included as such transactions do not contribute to current flow of goods and services. These financial assets are mere paper claims and involve a change of title only.

However, any commission or brokerage on such financial assets is included as it is a productive service.

(v) Expenditure on own account production (like production for self-consumption, imputed value of owner occupied houses, free services from general government and private non-profit making institutions serving households) will be included in the national income since these are productive services.

- **Gross Domestic Product (GDP):** It is the total value of all the final goods and services by all the enterprises (both resident and non-resident) within the domestic territory of a country in a particular year.

- **Gross Domestic Product at Market Price ( $GDP_{MP}$ ):**

(1) Private Final Consumption Expenditure (C) + (2) Government Final Consumption Expenditure (G) + (3) Investment or Gross Capital Formation (i) + Net Exports. Net Domestic Product at Market Price ( $NDP_{MP}$ ) =  $GDP_{MP} - \text{Depreciation}$  Net Domestic Product at Factor Cost =  $GDP_{MP} - \text{Indirect Taxes} + \text{Subsidies}$  National Income =  $GDP_{MP} - \text{Depreciation} - \text{Net Indirect Taxes} + \text{Net Income from Abroad}$ .

- **Nominal Gross Domestic Product:** When the goods and services are produced by all producing units in the domestic territory of a country during an accounting year and valued at current year's prices or current prices, it is called Nominal GDP or GDP at current prices. It is influenced by change in both physical output and price level. It is not considered a true indicator of economic development.

- **Real Gross Domestic Product:** When the goods and services are produced by all producing units in the domestic territory of a country during an accounting year and valued at base year's prices or constant price, it is called real GDP or GDP at constant prices. It changes only by change in physical output not by change in price level. It is called a true indicator of economic development.

- **Gross National Product:** It is defined as the total value of all final goods and services produced in a country in a particular year, plus the income which is earned by its citizens who are located abroad and minus the income of non-residents located within the country.  $GNP_{MP} = GDP_{MP} + \text{Net Factor Income from Abroad}$

- **Net National Product at Factor Cost ( $NNP_{FC}$ ):** It is the sum total of factor incomes (rent + interest + profits + wages) earned by normal residents of a country during

the period of an accounting year. It is also known as the National Income.  $NNP_{FC} = GNP_{FC} - \text{Depreciation}$  OR  $NNP_{FC} = NDP_{FC} + NFIA$

• **Net National Product at Market Price ( $NNP_{MP}$ ):** It refers to market value of final goods and services produced during the year inclusive of Net Factor Income from Abroad but exclusive of depreciation.  $NNP_{MP} = GDP_{MP} - \text{Depreciation} + NFIA$

### Topic-3 GDP & Welfare

• **GDP and Welfare:** In general, Real GDP and Welfare are directly related with each other. A higher GDP implies more production of goods and services. It means more availability of goods and services. But more goods and services may not necessarily indicate that the people were better off during the year. In other words, a higher GDP may not necessarily mean higher welfare of the people.

• Welfare mean material well being of the people. It depends on many economic factors like national income, consumption level, quantity of goods, etc., and non-economic factors like environmental pollution, law and order etc. The welfare which depends on economic factors is called economic welfare and the welfare which depends on non-economic factor is called non-economic welfare. The sum total of economic and non-economic welfare is called social welfare.

• **GDP is not an appropriate indicator for Welfare:** GDP may be a good indicator of economic growth but not of economic welfare or economic development because of: (a) **Externalities:** Externalities refer to benefits or harms of an activity caused by a firm or an individual, for which they are not paid or penalized. For example, environmental pollution caused by industrial plants is a negative externality and building a flyover is a positive externality. (b) **Composition of GDP:** GDP does not exhibit the structure of the product. If the increase in GDP is mainly due to increased production of war equipment and armaments, then such an increase cannot improve welfare in economy. (c) **Distribution of GDP:** When GDP is unevenly distributed, increase in GDP does not increase welfare. (d) **Non-monetary exchanges:** Many activities in an economy are not evaluated in monetary terms, they are not included in GDP, due to non availability of data. However, such activities influence the economic welfare of people of the economy.

**Important Terms** **Real Flow:** It shows the flow of goods and services among the various sectors of economy. **Money Flow:** It shows the flow of money among various sectors of economy. **Leakages of Income:** It is the amount of money which is withdrawn from circular flow of income. **Injections of Income:** It is the amount of money which is added to the circular flow of income. **Net Factor Income from Abroad (NFIA):** This is the difference between the income earned from abroad for rendering factor services by the normal residents of the country to the rest of the world and the income paid for the factor services rendered by non-residents in the domestic territory of a country. **Factor Income:** These are incomes received by the owners of factors of production for rendering their factor services to the producers. **Transfer Payments:** These are all those unilateral payments corresponding to which there is no value addition in the economy, e.g., gifts, donations, etc. **Domestic Territory:** Domestic or Economic territory is the geographical territory administered by a Government within which persons, goods and capital circulate freely. **Normal Residents:** A resident (or a normal resident) of a country is a person or institution who ordinarily resides in a country and whose centre of interest also lies in that particular country. **Market Price:** It is the price at which a commodity is sold and purchased in the market. **Factor Cost:** It refers to all factor payments made by

the producing units (firms) to the factors of production involved in the production of goods and services.

**Externalities:** Externalities refer to benefits or harms of an activity caused by a firm or an individual, for which they are not paid or penalized. For example, environmental pollution caused by industrial plants is a negative externality and building a flyover is a positive externality. **Value Added:** Means additions in value by each firm in the process of production at each stage. **Double Counting:** Counting the value of the same product more than once in calculation of National Income. **Mixed Income of the Self-Employed:** It includes both the profits earned on business in which you are employed as well as the stipulated wage for the labour put in by you to yourself.

## Chapter 2 Money And Banking

### Topic-1 Money Revision Notes

• **Definition of Money:** Money may be defined as anything which is generally acceptable as a medium of exchange and also acts as common measures of value, store of value and standard of deferred payment.

**Functions of Money:** The functions of money can be classified into the following two categories:

**Primary Functions:** These are those functions which are common to all countries during all time periods. These include the following:

(a) **Medium of exchange:** Money, as a medium of exchange, means that it can be used to make payments for all transactions of goods and services. It is the most essential function of money. Money has the quality of general acceptability. So, all exchanges take place in terms of money. This function has removed the major difficulty of lack of double coincidence of wants and inconveniences associated with the barter system. Use of money allows purchase and sale to be conducted independently of one another. This function of money facilitates trade and helps in conducting transactions in an economy. Money has no power to satisfy human wants, but it commands power to purchase those things, which have utility to satisfy human wants (b) **Measure of Value:** Money serves as a measure of value in terms of unit of account, i.e., in monetary units. For example, value of sugar can be expressed in monetary unit by saying that price of sugar is ₹ 15 per kg.

**Secondary Functions:** These are those functions which are supplementary to the primary functions discussed above. These include the following: (a) **Standard of Deferred Payments:** Deferred payments refer to those payments which are made in future. Money, as a standard of deferred payments, means that money acts as a 'standard' for payments, which are to be made in future. Every day, millions of transactions take place in which payments are not made immediately. Money encourages such transactions and helps in capital formation and economic development of the economy. Money as a standard of deferred payments has simplified the borrowing and lending operations. It has led to the creation of financial institutions. Under barter system, it was very difficult to make future payments and contractual payments such as salaries, loans, interest payments, etc. For example, it was difficult to decide whether wages to a labour are to be paid in terms of food grains or any other commodity. This is because it was difficult to value the services of labour in terms of a commodity. Similarly, if a loan is taken in the form of a commodity, then the problem will arise in its repayment. However, as superior to the Barter System, money made the system of deferred or



contractual payments such as salaries, interest payments, etc. possible. Hence, Money is accepted as a standard of deferred payments because: (1) its price remains stable, (2) it has general acceptability (3) it is more durable compared to other commodities. **(b)**

**Store of Value:** Store of Value function of money means that money can be used as an asset for storing value. It further means that the stored money can be used for transactions in future. This is because money comes in convenient denominations, easily mobile and can easily be used for transaction. It is convenient to store value in terms of money because: (1) it has general acceptability, (2) stability of its value, (3) it is convenient to store money. **(c) Transfer of Value:** Money serves as a convenient mode of the transfer of value because of its general acceptability and the merit of liquidity.

**'Unit of Account' function of money & How it solved the related problem created by barter system?**

Unit of Account function of money means that money can be used for quoting prices or recording transactions. This removes the difficulty of keeping accounts and makes possible the existence of financial institutions. With the introduction of money, the value of each commodity can be estimated from its price which is in terms of a common unit, say rupees. E.g., we know that the value of one pen is `10 and value of a notebook is `20. Therefore, 2 pens are equivalent to 1 notebook. Therefore, the relative value of goods can be determined. In barter system, if there are 10 goods the price of each good is measured in terms of 9 other goods which makes the exchange more complex. Thus, there is no common measure of value which gets overcome with the introduction of money.

Further, Use of money overcomes the drawbacks of barter system of exchange in the following manner: **(i)** With the introduction of money, double coincidence of wants is no longer needed. **(ii)** Money facilitates storage of value which was difficult in barter system. **(iii)** Money facilitates satisfaction of wants even in smaller units which was not possible in barter system. **(iv)** Money serves as a medium of exchange. Accordingly, scope of exchange has greatly widened.

**• Money Supply:** Money Supply is the total stock of money in circulation held by public at a given point of time. In other words, Volume of money held by public for transactions or settlement of debts. But it doesn't include the stock of money with the supplier of money.

**Components of Money Supply: (i) Currency with public:** Currency coins and notes issued by government of Central Bank of the country. **(ii) Demand Deposits:** Deposits of the public with the banks which can be withdrawn at any time

**• Measures of Money Supply:** In India, RBI uses four measures of money supply. These are  $M_1$ ,  $M_2$ ,  $M_3$  and  $M_4$ . **(a)**  $M_1 = C + DD + OD$  **(b)**  $M_2 = M_1 + \text{Saving Deposits with Post Office}$  **(c)**  $M_3 = M_1 + \text{Time Deposits of Public with Banks}$  **(d)**  $M_4 = M_3 + \text{Total Deposits with the Post Offices}$ . Measures of Money Supply = Currency held by Public + Net Demand Deposit of Banks

**• Narrow Approach of Money Supply:** In narrow sense, we include only liquid assets which are easily acceptable for payments. It includes  $M_1$  and  $M_2$ .

**• Broad Approach of Money:** It refers to currency held by public, demand deposits and time deposits. It includes  $M_3$  and  $M_4$ .

**• Currency with Public (C):** Currency of a country is issued either by the government or by the Central Bank. It is called Legal Tender Money.

**• Demand Deposits (DD):** Public deposits with bank

which public may withdraw at any time or on demand, bank has to pay it. **Other Deposits (OD): These deposits include: (i)** Demand Deposits of public financial institutions with RBI **(ii)** Demand Deposits of international financial institutions with RBI **(iii)** Demand Deposits of foreign government and central banks with RBI

**• Time Deposits (TD):** Those deposits of public with bank which can be withdrawn only after completion of that period for which it has been deposited with banks.

**• Stock of Money:** If supply of money is studied at a point of time; it is called Stock of money.

**• Flow of Money:** When supply of money is considered over a period of time; it is called Flow of Money.

**• High Powered Money or Reserve Money:** It is the sum of **(i)** Currency held by the public **(ii)** Cash reserve of the banks.  $H = C + R$

**• Factors Affecting Money Supply: (i)** Central Bank, **(ii)** Commercial Banks, **(iii)** Government, **(iv)** Banking Habits of the People, **(v)** Velocity of Circulation, **(vi)** Volume of Trade and **(vii)** Amount of Demand Deposits.

**• Who Supplies Money:** Central Bank of the country. In India, Reserve Bank of India.

## Topic-2 Commercial Banks and Central Bank Revision Notes

**• Money creation by Commercial Banks:** Money creation is a process in which a Commercial Bank creates total deposits many times the initial deposits. The capacity of Commercial Bank to create money depends on two factors:

**(i)** Amount of initial fresh deposit

**(ii)** Legal Reserve Ratio (LRR)

Money Multiplier =  $1/LRR$

Money Creation = Initial Deposit  $\times$  Money multiplier.

Working: Suppose **(i)** Initial Deposit = `1000 **(ii)** LRR = 20%

As required, the bank keeps 20% i.e., `200 as cash reserve and lend the remaining `800. Those who borrow use the money for making payments. As assumed those who receive these payments put the money back into their bank accounts. This creates a fresh deposit of `800. The bank again keep 20%, i.e., `160 and lend `640. In this way the money goes on multiplying leading to total money creation of `5000.

Money Creation = Initial Deposit  $\times 1/LRR = `1000 \times 1/0.2 = `5000$

**• Central Bank:** A Central Bank is an apex institution in the banking structure of the country. It Supervises, controls and regulates the activities of Commercial Banks and acts as a Banker to them. RBI (Reserve Bank of India) is the Central Bank of India.

**• Functions of RBI Central Bank:**

**(i) Monopoly of Note Issue/Bank of Issue -** The Central Bank of a country has the sole authority of issuing currency notes and coins in the country. All the currency issued by the Central Bank is unlimited legal tenders. No other Commercial Bank or financial institution can issue these currencies except Central Bank. Often, the Central Bank divides its functions into two departments— Banking Department and Issue Department. It is the issue department that is responsible for note-issuing. It issues currency to cope with the demand for it, which depends upon the level of economic activity in the economy. Hence, Central Bank is also known as Bank of Issue.

**(ii) Banker to the Government -** Central bank acts as bankers' fiscal agent and adviser to the government. As banker to the government, the central bank keeps the

deposits of the central and state governments and makes payments on behalf of governments. But it does not pay interest on government deposits. It buys and sells foreign currencies on behalf of the government. It keeps the stock of gold of the government. Thus, it is the custodian of government money and wealth. As a fiscal agent, the central bank makes shortterm loans to the government. It floats loans, pays interest on them, and finally repays them on behalf of the government. Thus, it manages the entire public debt. The central bank also advises the government on such economic and money matters as controlling inflation or deflation, devaluation or revaluation of the currency, deficit financing, balance of payments, etc.

**(iii) Banker's Bank** - the central bank controls, organizes, regulates, directs and supervises the commercial banks. It performs various banking functions with the commercial banks like lending funds, maintaining reserves of the banks, parking the surplus funds of the banks, etc. These kinds of the reserves can be utilized by the central bank in the case of any crisis.

**(iv) Controller of Credit** - This is the most crucial function played by any central bank in the modern times. Central Banks are supposed to regulate and control the volume and direction of the credit by using the: **(i) Quantitative techniques** are those techniques which influence the quantum of credit in the economy like open market operations, bank rate policy, repo and reverse repo rate policy, etc. **(ii) Qualitative techniques** or selective credit control techniques are the ones which influence the direction of credit in the economy like margin requirements and moral suasion.

• **Monetary Management:** It means to regulate money and credit in such a way that it may satisfactorily meet the demand for money needed for trade, business and economic activities. Commercial banks have the power to create credit on the basis of deposits they receive.

• **Methods of Credit Control / Instruments of Monetary Policy:** Methods of credit control can be classified into two categories. These are:

**(i) Cash Reserve Ratio (CRR):** CRR refers to the minimum proportion of the total deposits that the commercial banks has to maintain with the central bank in the form of reserves. A decrease in CRR, would mean that banks would be required to keep a lesser portion in form of deposits with the central bank. This implies that the commercial banks are left with more amount of funds to lend out. Hence, the lending capacity of the banks increase, leading to increase in the money supply. On the contrary, a rise in CRR will lead to a decrease in the money supply

**(ii) Statutory Liquidity Ratio (SLR):** Statutory liquidity ratio is the ratio of deposits kept by the commercial banks with themselves. When the central bank wants to increase money supply, it reduces this ratio. Banks keep less amount as reserves. The remaining part of deposit can now be used for giving loans. Credit creation capacity of bank rises. Since deposits are a part of money supply, money supply increases.

**(iii) Repo Rate:** Repo rate is the rate at which the central bank lends money to the commercial banks. The increase (or decrease) in repo rate is often followed by increase (or decrease) in the market rate of interest. Accordingly, the cost of credit (also called the cost of capital) changes in the market. During inflation, the cost of capital is increased by increasing the repo rate. This reduces the flow of credit, as desired. On the other

hand, during deflation the cost of capital is reduced by reducing the repo rate. This increases the flow of credit.

**(iv) Reverse Repo Rate:** Reverse Repo Rate refers to the rate of interest paid by the Central Bank on deposits made by the Commercial Banks. When it is raised, Commercial Banks are encouraged to make more deposits with Central Bank. As a result, funds available for lending with the Commercial Banks decrease. Their capacity of lending declines and Credit Creation is less

**(v) Bank Rate:** Bank rate is the rate at which central bank offers loans to the Commercial Banks as a lender of last resort. During inflation, when supply of credit is to be reduced, bank rate is increased. This reduces borrowing by the Commercial Banks, implying a reduction in their cash reserve and therefore, a reduction in their capacity to create credit. Following increase in bank rate, market rate of interest is also raised, implying a check on borrowings from the Commercial Banks. Thus, overall supply of credit is reduced in the economy. Exactly opposite is done to combat deflation: bank rate is lowered to increase the supply of credit.

**(vi) Open Market Operations:** Open market operations refers to sale and purchase of securities by the central bank in the open market. To increase money supply (as during deflation) securities are purchased by the central bank. On the other hand, to decrease money supply (as during inflation) securities are sold off. By buying the securities, the central bank releases liquidity and hence, a rise in capacity to create credit of the commercial banks. By selling the securities, liquidity is sucked from the economy and hence, a reduction in capacity to create credit of the commercial banks.

**(vii) Margin Requirements:** Margin Requirement refers to the difference between market value of the securities offered for loans and the amount of loan offered by the commercial banks. It is qualitative method of credit control.

**Important Terms** **Asset:** Something that is owned. **Liability:** An obligation, debt, or other object, due to someone in the future. **Reserves:** The money deposited in a bank. **Reserve requirement:** The fraction of all reserves of a bank that must be held by the bank in vaults. **Legal reserves:** The money held by the bank in vaults to satisfy the reserve requirement. **Excess reserves:** Money that isn't required to be stored by the bank. This money can be loaned out. **Discount rate:** Interest rate on a loan from the Federal Reserve to a bank. **Federal funds rate:** Interest rate on a loan from a bank to another bank. **Fiat Money:** Money that holds value only because the government declares it as legal tender

## Chapter 3 Aggregate Demand And Short-Run Equilibrium Output

### Topic-1 Aggregate Demand and Saving Revision Notes

• **Aggregate Demand:** Aggregate Demand refers to the total demand for all goods and services in the economic system as a whole. This is expressed in terms of total expenditure made in the economy.

• **Constituents of Aggregate Demand (AD):** In an open economy, constituents of AD are: **(i)** Consumption Expenditure **(ii)** Investment Expenditure **(iii)** Government Expenditure **(iv)** Net Exports  $AD = C + I + G + (X - M)$

• **Private Consumption Expenditure:** The total demand for all goods and services by the household in an economy during an accounting year, is termed as

Private Consumption Expenditure. It is determined by the level of personal disposable income of the economy.

- **Private Investment Expenditure:** The expenditure of households and private investor to purchase goods or services that adds to their stock of capital, is termed as Private Investment Expenditure. It is mainly depends on market rate of interest.

- **Government Expenditure:** It includes the total expenditure of government on the purchase of consumption goods and investment expenditure. There is a significant difference between government and private investment. Private investments are done on consideration of profit and termed as Induced Investment.

- **Autonomous Investment:** Government investment expenditure is done on considerations of social welfare like construction of roads, school, dams and flyover are termed as Autonomous Investment.

- **Aggregate Supply:** The concept of aggregate supply is related to the total supply of goods and services made available by all the producers in the economy. It can be expressed in three forms: (i) Money value of goods and services produced during a year in an economy, i.e., National Income. (ii) In the form of total income, i.e., consumption + saving. (iii) In the form of minimum income which the firm will receive as sale proceeds from the sale of goods and services.

- **Effective Demand:** It signifies the point where aggregate demand equals to aggregate supply. Thus, that level where aggregate demand equals aggregate supply is called Effective Demand.

- **Investment:** Investment expenditure includes expenditure for producer's durable equipment, new construction and the change in inventories.

- **Induced Investment:** It depends upon income and profit in the economy. Investment made with expectation of profit is called induced investment. It depends upon (i) Marginal efficiency of capital, and (ii) rate of interest.

- **Autonomous Investment:** This investment is independent of income and employment. Such investment is made by the government with the motive of social welfare.

### Topic-2 Short Run Equilibrium Output Revision Notes

- **Short Run:** According to J. M. Keynes, "A period of time during which level of output is determined exclusively by the level of employment in the economy, is termed as short run."

- **Full Employment:** It refers to a situation, where all those workers who are able to work and willing to work get employment at prevailing wage rate.

- **In an Economy:** Income Equilibrium Level = Output Equilibrium Level = Employment Equilibrium Level

- Short Run Equilibrium, i.e., Keynesian Approach AD = AS Approach

(A) Employment is determined at a point where AD = AS.

(B) If  $AD > AS$ , firm will employ more factors of production and it will again attain  $AD = AS$ .

(C) If  $AD < AS$ , firm will cut employment and it will bring again  $AD = AS$ .

- **Change in Equilibrium:** Equilibrium position described above may be of full employment or may not be of full employment. It only determines the level of income. Therefore, for full employment we have to twist AD or AS. But AS depends on technological factors therefore if AD increases, it will raise the level of

employment.  $S = I$  Approach

### Topic-3 Investment Multiplier and Its Working Revision Notes

- **Multiplier:** It establishes relation between investment and income. It measures the change in income due to change in investment.  $K = \frac{D Y I}{\text{Change in Investment}}$

- **Forward and Backward action of multiplier**

- Multiplier is two-edge instrument and hence, it works in both direction. (i) **Forward Action:** Additional investment creates additional income many more times.

- (ii) **Backward Action:** Withdrawal of investment decreases income many more times.

## Chapter 4 Problems And Measures Of Excess And Deficient Demand

### Topic-1 Problems of Deficient and Excess Demand Revision Notes

- **Deficient Demand:** When AD falls short of AS at full employment, it is called deficient demand. Deficient Demand =  $AD < AS$  (at full employment level).

- **Reasons for Deficient Demand:** (i) Reduction in supply of currency, (ii) Increase in Bank Rate, (iii) Increase in Taxes, (iv) Reduction in Public Expenditure, (v) Increase in Propensity to Save, (vi) Decline in Export Demand.

- **Effects of Deficient Demand:** (i) Fall in production level, (ii) Fall in price level (iii) Increase in unemployment.

- **Excess Demand:** Excess demand refers to a situation when aggregate demand exceeds aggregate supply corresponding to full employment.  $AD > AS$  (at full employment level)

- **Reasons for Excess Demand:** (i) Increase in public expenditure, (ii) Reduction in taxes, (iii) Deficit financing, (iv) Extension of credit facilities, (v) Increase in investment demand, (vi) Increase in propensity to consume (vii) Increase in export demand.

- **Effects of Excess Demand:** (i) Decrease in unemployment, (ii) Increase in production level, and (iii) Increase in price level.

- **Cyclical Fluctuations:** In real life, Aggregate demand does not match Aggregate Supply. Consequently economy faces economic fluctuations like: Depression → Recovery → Full employment → Propensity → Recession → Again depression and process goes on.

### Topic-2 Measures to Correct Deficient and Excess Demand Revision Notes

- **There are four important ways to correct excess and deficient demand:** (i) Fiscal Policy, (ii) Monetary Policy, (iii) Foreign Trade Policy, (iv) Other Measures.

- **Fiscal Policy:** Government measures related to public expenditure, taxation and public debt are referred as fiscal measures and the policy related to these measures is called Fiscal Policy.

- **Instruments of Fiscal Policy:** Public expenditure, taxation, public debt and deficit financing.

- **Monetary Policy:** A policy, which controls the money supply, credit availability and its cost is termed as monetary policy. Central Bank of the country frames this policy and ensures its execution.

- **Measures of Monetary Policy:** (i) **Quantitative:** Bank Rate, Open Market Operations, Minimum Reserve Ratio and Liquidity Ratio. (ii) **Qualitative:** Margin

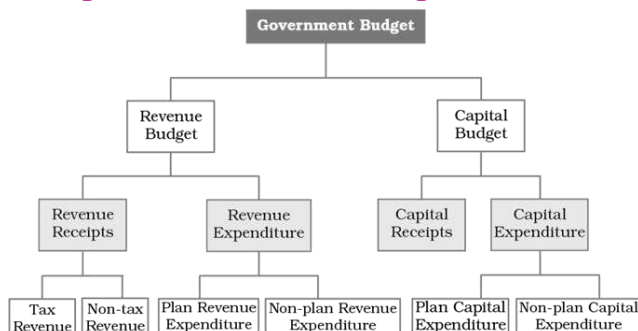


requirement of loans, Rationing of credit, Direct action and Moral pressure.

## Chapter 5 Government Budget And The Economy

### Revision Notes

- **Budget:** Budget is a financial statement showing the expected receipt and expenditure of Government for the coming fiscal or financial year.
- **Objectives of Government Budget:** (i) Encouragement to economic development, (ii) Balanced Regional development, (iii) Redistribution of Income and Property, (iv) Economic stability, (v) Generation of employment, (vi) Management of public enterprises.
- **Components of Government Expenditure:**



**(i) Revenue Budget /The Revenue Account:** The Revenue Budget shows the current receipts of the government and the expenditure that can be met from these receipts. It shows revenue receipts and revenue expenditure of the government. It includes **Revenue Receipts and Revenue Expenditure**.

• **Revenue Receipts:** Revenue receipts are receipts of the government which are non-redeemable, that is, they cannot be reclaimed from the government. (a) Which do not cause any reduction in assets and; (b) Which do not create any corresponding liability to the government. Example: Tax receipts of the government. They are divided into tax and non-tax revenues.

**Direct Tax:** Direct Taxes are those taxes which are paid by the same person on whom they are levied. When Government imposes a tax on a person and paid by the same person is called direct tax. Its burden can not be shifted to others. For example: Income Tax, Property Tax.

**Indirect Tax:** It is a tax on goods and services. It is to be initially paid by the producers / traders but its final burden can be passed on to the final buyers by way of increase in price of the taxed commodity. GST or VAT is an example of it.

**Non-Tax Receipts:** Non-Tax Receipts are those receipts which are received from sources other than taxes, e.g., Fees, Fines, Escheats, Grants / Donations, etc.

• **Revenue Expenditure:** It is the expenditure by the government which: (i) Does not cause increase in government assets, and; (ii) Does not cause any reduction in government liability.

**Basis of classifying taxes into direct and indirect tax -** A tax is a legally compulsory payment imposed by the government. The basis of classifying taxes into direct and indirect tax are as follows: **(i) Final Burden:** Direct taxes are those taxes the final burden of which falls on that very person who makes the payment to the government. On the other hand, indirect taxes are those

which are paid to the government by one person but their burden is borne by another person. **(ii) Shifting of Tax:** Direct taxes cannot be shifted to other persons whereas the indirect taxes can be shifted. **(iii) Progressiveness:** Direct taxes are generally progressive. Their real burden is more on the rich. On the other hand, indirect taxes are generally regressive. Their real burden is more on the poor. **Example:** A shopkeeper pays GST to the government but usually recovers it from the customers as a part of price of the commodity sold. So, impact of GST (an indirect tax) is ultimately shifted to the consumers. But the impact of income tax is to be finally borne by the tax payer himself. He cannot shift its burden onto others. **Direct Tax:** Income Tax, Corporate Tax. **Indirect Tax:** Service Tax, Excise Duty

**(ii) Capital Budget/The Capital Account:** The Capital Budget is an account of the assets as well as liabilities of the central government, which takes into consideration changes in capital. It consists of capital receipts and capital expenditure of the government. This shows the capital requirements of the government and the pattern of their financing.

• **Capital Receipts:** (a) All those receipts of the government which create liability or reduce financial assets are termed as capital receipts. The main items of capital receipts are loans raised by the government from the public which are called market borrowings, borrowing by the government from the Reserve Bank and commercial banks and other financial institutions through the sale of treasury bills, loans received from foreign governments and international organisations, and recoveries of loans granted by the central government. Other items include small savings (Post-Office Savings Accounts, National Savings Certificates, etc), provident funds and net receipts obtained from the sale of shares in Public Sector Undertakings (PSUs) (This is referred to as PSU disinvestment).

• **Capital Expenditure:** There are expenditures of the government which result in creation of physical or financial assets or reduction in financial liabilities. This includes expenditure on the acquisition of land, building, machinery, equipment, investment in shares, and loans and advances by the central government to state and union territory governments, PSUs and other parties. Capital expenditure is also categorised as plan and non-plan in the budget documents. Plan capital expenditure, like its revenue counterpart, relates to central plan and central assistance for state and union territory plans. Non-plan capital expenditure covers various general, social and economic services provided by the government.

When a government spends more than it collects by way of revenue, it incurs a budget deficit<sup>6</sup>. There are various measures that capture government deficit and they have their own implications for the economy.

**Revenue Deficit:** The revenue deficit refers to the excess of government's revenue expenditure over revenue receipts

Revenue deficit = Revenue expenditure – Revenue receipts

The revenue deficit includes only such transactions that affect the current income and expenditure of the government. When the government incurs a revenue deficit, it implies that the government is dissaving and is using up the savings of the other sectors of the economy to finance a part of its consumption expenditure. This situation means that the government will have to borrow not only to finance its investment but also its

consumption requirements. This will lead to a build up of stock of debt and interest liabilities and force the government, eventually, to cut expenditure. Since a major part of revenue expenditure is committed expenditure, it cannot be reduced. Often the government reduces productive capital expenditure or welfare expenditure. This would mean lower growth and adverse welfare implications.

**Fiscal Deficit:** Fiscal deficit is the difference between the government's total expenditure and its total receipts excluding borrowing

Gross fiscal deficit = Total expenditure – (Revenue receipts + Non-debt creating capital receipts)

Non-debt creating capital receipts are those receipts which are not borrowings and, therefore, do not give rise to debt. Examples are recovery of loans and the proceeds from the sale of PSUs. The fiscal deficit will have to be financed through borrowing. Thus, it indicates the total borrowing requirements of the government from all sources. From the financing side  
Gross fiscal deficit = Net borrowing at home + Borrowing from RBI + Borrowing from abroad  
Net borrowing at home includes that directly borrowed from the public through debt instruments (for example, the various small savings schemes) and indirectly from commercial banks through Statutory Liquidity Ratio (SLR). The gross fiscal deficit is a key variable in judging the financial health of the public sector and the stability of the economy. From the way gross fiscal deficit is measured as given above, it can be seen that revenue deficit is a part of fiscal deficit (Fiscal Deficit = Revenue Deficit + Capital Expenditure - non-debt creating capital receipts). A large share of revenue deficit in fiscal deficit indicated that a large part of borrowing is being used to meet its consumption expenditure needs rather than investment.

**Primary Deficit:** We must note that the borrowing requirement of the government includes interest obligations on accumulated debt. The goal of measuring primary deficit is to focus on present fiscal imbalances. To obtain an estimate of borrowing on account of current expenditures exceeding revenues, we need to calculate what has been called the primary deficit. It is simply the fiscal deficit minus the interest payments  
Gross primary deficit = Gross fiscal deficit – Net interest liabilities

Net interest liabilities consist of interest payments minus interest receipts by the government on net domestic lending.

**In Short Budget Deficits:** It is the excess of total estimated expenditure over total estimated revenue.

**(i) Revenue Deficit:** Revenue Receipts — Revenue Expenditure.

**(ii) Fiscal Deficit:** [Revenue Expenditure + Capital Expenditure] – [Revenue Receipts + Capital Receipts (other than government borrowings)].

**Primary Deficit:** By deducting Interest payment from fiscal deficit we get primary deficit. Primary Deficit = Fiscal Deficit – Interest Payment

- **Types of Budget (i) Balanced Budget:** Total Expenditure = Total Revenue
- (ii) Deficit Budget:** Total Expenditure > Total Revenue
- (iii) Surplus Budget:** Total Anticipated Expenditure < Total Anticipated Revenue

- **Measures to Correct Different Deficit:** (i) Raising government revenue, (ii) Monetary Expansion or Deficit Financing, (iii) Borrowing from general public, (iv) Disinvestment, (v) Lowering government expenditure.

**Fiscal Policy**

One of Keynes's main ideas in The General Theory of Employment, Interest and Money was that government fiscal policy should be used to stabilise the level of output and employment. Through changes in its expenditure and taxes, the government attempts to increase output and income and seeks to stabilise the ups and downs in the economy. In the process, fiscal policy creates a surplus (when total receipts exceed expenditure) or a deficit budget (when total expenditure exceed receipts) rather than a balanced budget (when expenditure equals receipts).

**How the allocation of resources can be influenced in the government budget through taxes, expenditure and subsidies?** Through the budgetary policy, Government aims to reallocate resources in accordance with the economic (profit maximisation) and social (public welfare) priorities of the country.

Government can influence allocation of resources through: **(i) Tax concessions or subsidies:** To encourage investment, government can give tax concession, subsidies etc. to the producers. For example, Government discourages the production of harmful consumption goods (like liquor, cigarettes etc.) through heavy taxes and encourages the use of 'Khaki products' by providing subsidies. **(ii) Directly producing goods and services:** If private sector does not take interest, government can directly undertake the production.

Government can encourage production of selected goods and services by providing tax concessions. For example, electricity generation etc. Government can also give subsidies to enterprises who are willing to undertake production in backward areas etc. In this way government budget can be used to influence allocation of resources in the country. Increasing taxes and reducing subsidies will have the opposite effects

**How Government can use the budgetary policy to reduce inequalities in incomes?** Reducing inequality and poverty and promoting equity are important macroeconomic objectives. The widening income gap between the rich and poor has highlighted the need to understand the causes of relative inequality and poverty and to construct suitable policies to reduce poverty and the income gap narrow.

**The budgetary measures by which it can be reduced are:** **(i) Progressive Taxation:** Government can intervene to promote equity and reduce inequality and poverty, through the tax and benefits system, progressive tax system means more tax from those on higher levels of income and redistributes welfare benefits to those on lower incomes. **(ii) Increasing Government's Expenditure:** Government increases its expenditure by spending on development projects like on health and education. By doing this, the government reduces the gap between rich and poor

**Debt**  
Budgetary deficits must be financed by either taxation, borrowing or printing money. Governments have mostly relied on borrowing, giving rise to what is called government debt. The concepts of deficits and debt are closely related. Deficits can be thought of as a flow which add to the stock of debt. If the government continues to borrow year after year, it leads to the accumulation of debt and the government has to pay more and more by way of interest. These interest payments themselves contribute to the debt. Perspectives on the Appropriate Amount of Government Debt: There are two interlinked aspects of the issue. One is whether government debt is a burden

and two, the issue of financing the debt. The burden of debt must be discussed keeping in mind that what is true of one small trader's debt may not be true for the government's debt, and one must deal with the 'whole' differently from the 'part'. Unlike any one trader, the government can raise resources through taxation and printing money.

By borrowing, the government transfers the burden of reduced consumption on future generations. This is because it borrows by issuing bonds to the people living at present but may decide to pay off the bonds some twenty years later by raising taxes. These may be levied on the young population that have just entered the work force, whose disposable income will go down and hence consumption. Thus, national savings, it was argued, would fall. Also, government borrowing from the people reduces the savings available to the private sector. To the extent that this reduces capital formation and growth, debt acts as a 'burden' on future generations. Traditionally, it has been argued that when a government cuts taxes and runs a budget deficit, consumers respond to their after-tax income by spending more. It is possible that these people are short-sighted and do not understand the implications of budget deficits. They may not realise that at some point in the future, the government will have to raise taxes to pay off the debt and accumulated interest. Even if they comprehend this, they may expect the future taxes to fall not on them but on future generations.

A counter argument is that consumers are forward-looking and will base their spending not only on their current income but also on their expected future income. They will understand that borrowing today means higher taxes in the future. Further, the consumer will be concerned about future generations because they are the children and grandchildren of the present generation and the family which is the relevant decision making unit, continues living. They would increase savings now, which will fully offset the increased government dissaving so that national savings do not change. This view is called Ricardian equivalence after one of the greatest nineteenth century economists, David Ricardo, who first argued that in the face of high deficits, people save more. It is called 'equivalence' because it argues that taxation and borrowing are equivalent means of financing expenditure. When the government increases spending by borrowing today, which will be repaid by taxes in the future, it will have the same impact on the economy as an increase in government expenditure that is financed by a tax increase today.

It has often been argued that 'debt does not matter because we owe it to ourselves'. This is because although there is a transfer of resources between generations, purchasing power remains within the nation. However, any debt that is owed to foreigners involves a burden since we have to send goods abroad corresponding to the interest payments.

**Other Perspectives on Deficits and Debt:** One of the main criticisms of deficits is that they are inflationary. This is because when government increases spending or cuts taxes, aggregate demand increases. Firms may not be able to produce higher quantities that are being demanded at the ongoing prices. Prices will, therefore, have to rise. However, if there are unutilised resources, output is held back by lack of demand. A high fiscal deficit is accompanied by higher demand and greater output and, therefore, need not be inflationary. It has been argued that there is a decrease in investment

due to a reduction in the amount of savings available to the private sector. This is because if the government decides to borrow from private citizens by issuing bonds to finance its deficits, these bonds will compete with corporate bonds and other financial instruments for the available supply of funds. If some private savers decide to buy bonds, the funds remaining to be invested in private hands will be smaller. Thus, some private borrowers will get 'crowded out' of the financial markets as the government claims an increasing share of the economy's total savings. However, one must note that the economy's flow of savings is not really fixed unless we assume that income cannot be augmented. If government deficits succeed in their goal of raising production, there will be more income and, therefore, more saving. In this case, both government and industry can borrow more.

Also, if the government invests in infrastructure, future generations may be better off, provided the return on such investments is greater than the rate of interest. The actual debt could be paid off by the growth in output. The debt should not then be considered burdensome. The growth in debt will have to be judged by the growth of the economy as a whole.

**Deficit Reduction:** Government deficit can be reduced by an increase in taxes or reduction in expenditure. In India, the government has been trying to increase tax revenue with greater reliance on direct taxes (indirect taxes are regressive in nature – they impact all income groups equally). There has also been an attempt to raise receipts through the sale of shares in PSUs. However, the major thrust has been towards reduction in government expenditure. This could be achieved through making government activities more efficient through better planning of programmes and better administration. A recent study<sup>7</sup> by the Planning Commission has estimated that to transfer Re1 to the poor, government spends Rs 3.65 in the form of food subsidy, showing that cash transfers would lead to increase in welfare.

The other way is to change the scope of the government by withdrawing from some of the areas where it operated before. Cutting back government programmes in vital areas like agriculture, education, health, poverty alleviation, etc. would adversely affect the economy. Governments in many countries run huge deficits forcing them to eventually put in place self-imposed constraints of not increasing expenditure over pre-determined levels (Box 5.1 gives the main features of the FRBMA in India). These will have to be examined keeping in view the above factors. We must note that larger deficits do not always signify a more expansionary fiscal policy. The same fiscal measures can give rise to a large or small deficit, depending on the state of the economy. For example, if an economy experiences a recession and GDP falls, tax revenues fall because firms and households pay lower taxes when they earn less. This means that the deficit increases in a recession and falls in a boom, even with no change in fiscal policy.

#### FRBMA

The budget is not merely a statement of receipts and expenditures. Since Independence, with the launching of the Five-Year Plans, it has also become a significant national policy statement. The budget, it has been argued, reflects and shapes, and is, in turn, shaped by the country's economic life. Along with the budget, three policy statements are mandated by the Fiscal Responsibility and Budget Management Act, 2003



(FRBMA). The Medium-term Fiscal Policy Statement sets a three-year rolling target for specific fiscal indicators and examines whether revenue expenditure can be financed through revenue receipts on a sustainable basis and how productively capital receipts including market borrowings are being utilised. The Fiscal Policy Strategy Statement sets the priorities of the government in the fiscal area, examining current policies and justifying any deviation in important fiscal measures. The Macroeconomic Framework Statement assesses the prospects of the economy with respect to the GDP growth rate, fiscal balance of the central government and external balance.

### Fiscal Responsibility and Budget Management Act, 2003 (FRBMA)

In a multi-party parliamentary system, electoral concerns play an important role in determining expenditure policies. A legislative provision, it is argued, that is applicable to all governments – present and future – is likely to be effective in keeping deficits under control. The enactment of the FRBMA, in August 2003, marked a turning point in fiscal reforms, binding the government through an institutional framework to pursue a prudent fiscal policy. The central government must ensure inter-generational equity, long-term macro-economic stability by achieving sufficient revenue surplus, removing fiscal obstacles to monetary policy and effective debt management by limiting deficits and borrowing. The rules under the Act were notified with effect from July, 2004.

#### Main Features

1. The Act mandates the central government to take appropriate measures to reduce fiscal deficit to not more than 3 percent of GDP and to eliminate the revenue deficit by March 31, 2009 and thereafter build up adequate revenue surplus.
2. It requires the reduction in fiscal deficit by 0.3 per cent of GDP each year and the revenue deficit by 0.5 per cent. If this is not achieved through tax revenues, the necessary adjustment has to come from a reduction in expenditure.
3. The actual deficits may exceed the targets specified only on grounds of national security or natural calamity or such other exceptional grounds as the central government may specify.
4. The central government shall not borrow from the Reserve Bank of India except by way of advances to meet temporary excess of cash disbursements over cash receipts.
5. The Reserve Bank of India must not subscribe to the primary issues of central government securities from the year 2006-07.
6. Measures to be taken to ensure greater transparency in fiscal operations.
7. The central government to lay before both Houses of Parliament three statements – Medium-term Fiscal Policy Statement, The Fiscal Policy Strategy Statement, The Macroeconomic Framework Statement along with the Annual Financial Statement.
8. Quarterly review of the trends in receipts and expenditure in relation to the budget be placed before both Houses of Parliament.

The act applies to the central government. However, 26 states have already enacted fiscal responsibility legislations which have made the rule based fiscal reform programme of the government more broad based. Although the government has emphasised that the FRBMA is an important institutional mechanism to

ensure fiscal prudence and support macro economic balance there have been fears that welfare expenditure may get reduced to meet the targets mandated by the Act.

**Important Terms** **Development Expenditure:** It is directed towards development programmes of the country, and which directly contributes to the flow of goods and services in the economy. **Non-Development Expenditure:** It is not directly related to development programmes of the country, and which does not directly contribute to the flow of goods and services in the economy. **Planned Expenditure:** It is incurred in accordance with planned development programmes of the country. **Non-Planned Expenditure:** It refers to general expenditure incurred on essential general services of routine nature. **Disinvestment:** It refers to withdrawal of existing investment, e.g., Government of India is undertaking disinvestment by selling the shares of Maruti Suzuki

## Chapter 6 Balance Of Payments

### Revision Notes

We have so far assumed that the economy was closed—that it did not interact with the rest of the world. This was done to keep the model simple and explain the basic macroeconomic mechanisms. In reality, most modern economies are open. Interaction with other economies of the world widens choice in three broad ways

- (i) Consumers and firms have the opportunity to choose between domestic and foreign goods. This is the product market linkage which occurs through international trade.
- (ii) Investors have the opportunity to choose between domestic and foreign assets. This constitutes the financial market linkage.
- (iii) Firms can choose where to locate production and workers to choose where to work. This is the factor market linkage. Labour market linkages have been relatively less due to various restrictions on the movement of people through immigration laws. Movement of goods has traditionally been seen as a substitute for the movement of labour. We focus here on the first two linkages.

An open economy is one that trades with other nations in goods and services and, most often, also in financial assets. Indians, for instance, enjoy using products produced around the world and some of our production is exported to foreign countries. Foreign trade, therefore, influences Indian aggregate demand in two ways. First, when Indians buy foreign goods, this spending escapes as a leakage from the circular flow of income decreasing aggregate demand. Second, our exports to foreigners enter as an injection into the circular flow, increasing aggregate demand for domestically produced goods.

Now, when goods move across national borders, money must move in the opposite direction. At the international level, there is no single currency that is issued by a central authority. Foreign economic agents will accept a national currency only if they are convinced that the currency will maintain a stable purchasing power. Without this confidence, a currency will not be used as an international medium of exchange and unit of account since there is no international authority with the power to force the use of a particular currency in international transactions. Governments have tried to gain confidence of potential users by announcing that the national currency will be freely convertible at a fixed price into another asset, over

whose value the issuing authority has no control. This other asset most often has been gold, or other national currencies. There are two aspects of this commitment that has affected its credibility – the ability to convert freely in unlimited amounts and the price at which conversion takes place. The international monetary system has been set up to handle these issues and ensure stability in international transactions. A nation's commitment regarding the above two issues will affect its trade and financial interactions with the rest of the world.

We begin with the accounting of international trade and financial flows. The next section examines the determination of price at which national currencies are exchanged for each other. In section 6.3, the closed economy income-expenditure model is amended to include international effects, deals with the linkage between the trade deficit, budget deficit and the savings – investment gap briefly.

- **Balance of Payments Account (BOP):** Balance of payments is defined as the statement of accounts of a country's inflows and outflows of foreign exchange in a fiscal year. The transactions entering into the balance of payments account can be grouped under three broad accounts: (i) Current Account (ii) Capital Account (iii) Official International Reserve Account

- **Current Account:** Transactions related to trade in goods and services and transfer of payments constitute the current account. The components of current account do not cause a change in assets or liabilities status of the residents of a country or its government.

**Components of Current Account:** (i) **Visible:** Refers to the merchandise/goods exported from or imported by a country. Exports which result inflows for the country are placed on the credit side whereas, imports are placed on the debit side as they result into outflow of foreign exchange from the country. (ii) **Invisible:** Refers to the different types of services and transfers that take place between nations. They give rise to monetary receipts and payments for the nation

**In Other words items of Current Accounts:** (i) Merchandise account, (ii) Invisible items, and (iii) Unilateral transfers.

- **Capital Accounts:** Capital account represents international capital transactions which include sale and purchase of assets such as bonds, equities, lands, loans, bank accounts, etc. The components of capital account cause a change in assets & liabilities status of the residents of a country or its government.

### BoP Surplus and Deficit

The essence of international payments is that just like an individual who spends more than her income must finance the difference by selling assets or by borrowing, a country that has a deficit in its current account (spending more abroad than it receives from sales to the rest of the world) must finance it by selling assets or by borrowing abroad. Thus, any current account deficit is of necessity financed by a net capital inflow.

Alternatively, the country could engage in official reserve transactions, running down its reserves of foreign exchange, in the case of a deficit by selling foreign currency in the foreign exchange market. The decrease (increase) in official reserves is called the overall balance of payments deficit (surplus). The basic premise is that the monetary authorities are the ultimate financiers of any deficit in the balance of payments (or the recipients of any surplus). The balance of payments deficit or surplus is obtained after adding the current and capital account balances.

### Autonomous and Accommodating Transactions:

International economic transactions are called autonomous when transactions are made independently of the state of the BoP (for instance due to profit motive). These items are called 'above the line' items in the BoP. The balance of payments is said to be in surplus (deficit) if autonomous receipts are greater (less) than autonomous payments. Accommodating transactions (termed 'below the line' items), on the other hand, are determined by the net consequences of the autonomous items, that is, whether the BoP is in surplus or deficit. The official reserve transactions are seen as the accommodating item in the BoP (all others being autonomous).

Errors and Omissions constitute the third element in the BoP (apart from the current and capital accounts) which is the 'balancing item' reflecting our inability to record all international transactions accurately.

**Balance of Payment is always balanced:** The equality of both sides of balance of payment is only accounting equality, not the real equality.

- **Causes of Disequilibrium of Balance of Payments:**

(i) **Natural Causes:** (a) Natural Calamity occurs, (b) Any total disease spreads (ii) **Economic Factors:** (a) Development activities, (b) High rate of inflation, (c) Trade cycle, (d) Change in cost structure of trading partners, (e) Development of import substitutes. (iii) **Political Factors:** (a) Political Stability, (b) Political influence on foreign trade (iv) **Social Factors:** (a) Demonstration effect, (b) Change in tastes and preferences, (c) Cross border prejudices.

**State the effect of the following on the balance of payments situation.**

(i) **Increase in import duty of gold** - This will reduce import of gold and thus will have a favourable effect on BOP situation, as demand for foreign exchange will fall (ii) **Rise in the price of foreign currency** - Rise in price of foreign currency will make imports costlier, so import will fall and it will be favourable for BOP, as demand for foreign exchange will fall.

(iii) **'Make in India' programme** - Make in India' will increase supply (inflow) of foreign exchange in India causing improvement in the balance of payments position

(ii) **Import of pulses** - Import of pulses will lead to outflow of foreign exchange from the country causing adverse effect on balance of payment position.

**Distinguish between trade account and current account of balance of payments account** - Balance of trade account includes only visible items of trade. It is defined as the difference between export of goods and import of goods. Balance of trade account = exports of visible items - imports of visible items On the other hand, balance of current account includes transactions of visible items (merchandise goods), invisible items (services) and unilateral transfers (any one transfer).

**Important Terms** **Balance of Trade:** Balance of trade is the net difference of import and export of all visible items between the normal residents of a country and rest of the world. **Autonomous Transactions:** Autonomous items are those items of balance of payment which are related to such transactions as are determined by the motive of profit maximisation and not to maintain equilibrium in balance of payments. These items are generally called 'Above the Line items' in balance of payment. **Accommodating Items:** Refers to all the items related to the monetary transfers (or official reserve transactions), correcting balance of payments disequilibrium. Accommodating item refers to transactions that take place because of other activities in Balance of Payment. These transactions are meant to restore the Balance

of Payment identity. These items are generally called 'Below the Line items'. **Unilateral transfers:** Transfer of goods or services from one country to another without receiving anything in back, e.g., foreign aid

## Chapter 7 Foreign Exchange Rate

### Revision Notes

• **Foreign Exchange Rate:** Foreign exchange rate refers to the rate at which one unit of currency of a country can be exchanged for the number of units of currency of another country. Fixed exchange rate Managed floating exchange rate Flexible exchange rate

• **Types of Foreign Exchange Regimes:** (i) **Fixed Exchange Rate:** When the Central Bank of a country fixes (or pegs) the value of exchange rate, it is (ii) **Flexible Exchange Rate System:** The system of exchange rate in which value of a currency is allowed to adjust freely or to float as determined by the demand for and supply of foreign exchange is called Flexible Exchange Rate System. Here, value of currency is allowed to fluctuate or adjust freely according to change in demand and supply of foreign exchange. There is no official intervention in foreign exchange market. Under this system, the central bank, without intervention, allows the exchange rate to adjust so as to equate the supply and demand for foreign currency. In India, it is flexible exchange rate which is being determined. The foreign exchange market is busy at all times by changes in the exchange rate.

• **Managed floating system:** It is a system in which the central bank allows the exchange rate to be determined by market forces but intervenes at times to influence the rate. When central bank finds the rate is too high, it starts selling foreign exchange from its reserve to bring it down. When it finds that the rate is too low, it starts buying to raise the rate. This is done to save its own currency from short-term volatility in exchange rate caused by economic shocks and speculation. Thus, central bank intervenes to smoothen out ups and downs in the exchange rate of home currency to its own advantage. When central bank manipulates floating exchange rate to disadvantage of other countries, it is termed as dirty floating. However, central banks have no fixed times for intervention but have a set of rules and guidelines for this purpose.

• **Determination of Flexible Exchange Rate Demand and Supply theory of exchange rate determination Equilibrium Rate of Exchange:** Exchange rate is determined by the interaction of demand and supply in foreign exchange market. There is an inverse relationship between price of foreign exchange (i.e., rate of exchange) and demand for foreign exchange rate. On the contrary, there is direct relation between foreign exchange rate and supply of foreign exchange.

• **Reasons for the Demand of Foreign Exchange:** The demand of foreign exchange has inverse relation with flexible exchange rate. If flexible exchange rates rises, the demand of foreign exchange falls and vice versa. The demand for Foreign Exchange is created due to the following purposes: (i) To purchase goods and services from the rest of world. (ii) To purchase financial assets (i.e., to invest in bonds and equity shares) in a foreign country. (iii) To invest directly in shops, factories, buildings in foreign countries. (iv) To send gifts and grants abroad. (v) To speculate on the value of foreign currency. (vi) To undertake foreign tours.

• The supply of foreign exchange has positive relation with foreign exchange rate. If foreign exchange rate rises, the supply of foreign exchange rate also rises and vice versa. Sources of Supply of Foreign Exchange: (i) Direct purchase by foreigners in domestic market. (ii) Direct investment by foreigners in domestic market. (iii) Remittance by non-residents living abroad. (iv) Flow of foreign exchange due to speculative purchases by N.R.I. (v) Export of goods and services.

• **Factors Influencing Exchange Rate:** (i) Change in trade, (ii) Capital Movement, (iii) Sale and purchase of securities, (iv) Bank Rate, (v) Speculation, (vi) Political conditions.

### Important Insights

#### Distinction between depreciation and devaluation of domestic currency

- Depreciation of domestic currency refers to fall in the value of domestic currency in terms of foreign currency caused by rise in foreign exchange rate in the foreign exchange market.

Devaluation refers to fall in the value of domestic currency due to deliberate increase in foreign exchange rate by the government which follows fixed exchange rate system. Example: Suppose market rate of one US dollar rises from ` 60 to ` 65, the domestic buyers will now have to pay more for imports. It means one rupee can now buy less imports than before depreciation or devaluation.

#### The impact of rise in exchange rate on national income.

- (i) Rise in foreign exchange rate means appreciation in the value of foreign currency in relation to the domestic currency, i.e. one unit of foreign currency can buy more goods and services from India. It makes exports cheaper to foreign buyers and imports costlier to Indian buyers. As a result exports rise and imports fall leading to rise in net exports. A rise in net exports may lead to rise in national income.

**Improvement in exchange rate of the country's currency is always beneficial for the countries like India** - In developing countries like India, improvement in the exchange rate implies increase in the value of Indian currency in reference to foreign currency (Say, US dollar) and less rupees are to be paid for a dollar than before. It points to the relative strength of the Indian rupee in the international market. But it has adverse impact also as it is not beneficial for Indian Exports. It would mean that US now can buy less Indian goods for a dollar, than before, which might cut US demand for Indian goods. So, it can be concluded that improvement in exchange rate of the country's currency is beneficial but not always

**Important Terms Gold Standard System of Exchange Rate:** According to the Gold Standard System of Exchange Rate, value of one currency in terms of the other currency was fixed considering gold value of each currency. This system was prevailing before 1920's where gold was taken as the common unit of parity between the currencies of different countries.

**Nominal Exchange Rate:** It refers to the number of units of domestic currency, one must give up to get a unit of foreign currency. In simple terms, it refers to the price of foreign currency in terms of domestic currency. **Real Exchange Rate:** It refers to the relative price of foreign goods in terms of domestic goods.

**Dirty Floating:** When adjustment of exchange rates are done without following the rules and regulations of Foreign Exchange Market is termed as Dirty Floating. **Devaluation of a Currency:** When government or monetary authority of a country officially lowers the external value of its domestic currency (in respect of all other foreign currency) it is called devaluation of a currency. It takes place by government order under fixed exchange rate system.

**Revaluation of a currency:** When government or monetary authority of a country officially raises the external value of its



domestic currency (in respect of all other foreign currency) is called revaluation. It takes place by government order under fixed exchange rates system. **Depreciation of Currency:** In currency depreciation, there is a fall in the value of domestic currency, in term of foreign currency due to change in

demand and supply of the currency under flexible exchange rate system. **Appreciation in Currency:** In currency appreciation, there is a rise in the value of domestic currency in terms of foreign currency due to change in demand and supply of the currency under flexible exchange rate system

# NCERT Class 11

## Indian Economic Development

### GIST OF NCERT Classwise 30 Books

#### Chapter 1 Indian Economy On The Eve Of Independence

India had an independent economy before the advent of British rule. Though agriculture was the main source of livelihood for most of people, yet, the economy of the country was characterised by various kinds of manufacturing activities. The objective of policies adopted by the colonial government was to export raw material from India and import manufactured goods from England. The colonial government never made any sincere attempt to estimate India's national income and per capita income. First scientific estimate was made by **V.K.R.V. Rao** in 1931-32 during colonial rule.

##### • **Agriculture sector on the Eve of Independence—**

Indian economy under the British colonial rule remained fundamentally agrarian. The main causes of stagnation of agricultural sector were as follows: Change in Tenurial system and Commercialization of agriculture: **Change in System and Tenure—** (i) Permanent settlement or Zamindari system, (ii) Ryotwari system and (iii) Mahalwari system

**Commercialisation of Agriculture—** Main causes were: (i) Industrial revolution (ii) Commercial policy of British Government, (iii) Increase in foreign trade, (iv) Payment of Land Revenue in cash, (v) Use of money, (vi) Development of the means of transportation and communication, (vii) Expansion of the agricultural market, (viii) High price of cash crops.

##### • **Industrial Sector on the Eve of Independence—**

Like agriculture, industrial sector of India could not develop. At the time of independence, the condition of industrial sector was as follows: (i) De-industrialisation or decline of Indian Handicraft industry, (ii) One sided modern industrial structure, (iii) Lack of capital goods industries, (iv) Limited operation of public sector.

**Main characteristics of Industrial Development during British rule—** (i) Development of consumer product industries, (ii) Rising share of Indian capital, (iii) Concentration of enterprises in few hands, (iv) Dominance of foreign capital, (v) Investment of own capital of capitalists, (vi) Industrial policy, (vii) Regional imbalance in industrial development.

**Foreign Trade on the Eve of Independence—** India was a trading nation before the advent of colonial rule. But due to restrictive policies adopted by the colonial government, India's foreign trade was effected adversely. Foreign Trade conditions on the eve of independence were as follows: (i) Export of primary products and import of finished goods, (ii) Monopoly control of Britain on foreign trade, and (iii) Drain of Indian wealth.

**Demographic conditions on the eve of Independence—** First Census of population of British India was made in 1881. At the time of independence, the features of demographic conditions were as follows: (i) High birth and death rate, (ii) High infant mortality

rate, (iii) Low life expectancy ratio, (iv) Low literacy rate, (v) Low standard of living.

**Occupational structure on the eve of independence—** Occupational structure refers to distribution of working population across different industries and sectors. During colonial rule, occupational structure did not change much. The state of occupational structure during the British rule was as follows: (i) Pre-dominance of agricultural sector, and (ii) Growing regional variation.

**Infrastructure on the eve of independence—** Under infrastructure, we include all those industries and services which are used to develop other industries. Development of infrastructure during colonial rule was not to provide better facilities to general public but serve the British interest only. We include the following under infrastructure: (i) Railway, (ii) Roads, (iii) Water and Air transport, (iv) Communication system.

**Indian Economy on the Eve of Independence—** (i) Colonial economy, (ii) Semi-feudal economy, (iii) Backward economy, and (iv) Stagnant economy.

**Positive contribution of British rule—** (i) Self-sufficiency in food grain production, (ii) Better means of transportation, (iii) Check on famines, (iv) Shift to monetary economy, and (v) Effective administration set up.

• After independence, India envisaged an economic system which combines the best features of socialism and capitalism — this culminated in the mixed economics model

#### Low Level of Economic Development under the Colonial Rule

India had an independent economy before the advent of the British rule. Though agriculture was the main source of livelihood for most people, yet, the country's economy was characterised by various kinds of manufacturing activities. India was particularly well known for its handicraft industries in the fields of cotton and silk textiles, metal and precious stone works etc. These products enjoyed a worldwide market based on the reputation of the fine quality of material used and the high standards of craftsmanship seen in all imports from India.

The economic policies pursued by the colonial government in India were concerned more with the protection and promotion of the economic interests of their home country than with the development of the Indian economy. Such policies brought about a fundamental change in the structure of the Indian economy — transforming the country into supplier of raw materials and consumer of finished industrial products from Britain.

Obviously, the colonial government never made any sincere attempt to estimate India's national and per capita income. Some individual attempts which were made to measure such incomes yielded conflicting and inconsistent results. Among the notable estimators — Dadabhai Naoroji, William Digby, Findlay Shirras,

V.K.R.V. Rao and R.C. Desai — it was Rao, whose estimates during the colonial period was considered very significant. However, most studies did find that the country's growth of aggregate real output during the first half of the twentieth century was less than two per cent coupled with a meagre half per cent growth in per capita output per year.

### Agricultural Sector

India's economy under the British colonial rule remained fundamentally agrarian — about 85 per cent of the country's population lived mostly in villages and derived livelihood directly or indirectly from agriculture.

However, despite being the occupation of such a large population, the agricultural sector continued to experience stagnation and, not infrequently, unusual deterioration. **Agricultural productivity** became low though, in absolute terms, the sector experienced some growth due to the expansion of the aggregate area under cultivation. This stagnation in the agricultural sector was caused mainly because of the various systems of **land settlement** that were introduced by the colonial government. Particularly, under the zamindari system which was implemented in the then Bengal Presidency comprising parts of India's present-day eastern states, the profit accruing out of the agriculture sector went to the **zamindars** instead of the cultivators.

Agriculture During Pre-British India: The French traveller, Bernier, described seventeenth century Bengal in the following way: "The knowledge I have acquired of Bengal in two visits inclines me to believe that it is richer than Egypt. It exports, in abundance, cottons and silks, rice, sugar and butter. It produces amply — for its own consumption — wheat, vegetables, grains, fowls, ducks and geese. It has immense herds of pigs and flocks of sheep and goats. Fish of every kind it has in profusion. From rajmahal to the sea is an endless number of canals, cut in bygone ages from the Ganges by immense labour for navigation and irrigation."

However, a considerable number of **zamindars**, and not just the colonial government, did nothing to improve the condition of agriculture. The main interest of the zamindars was only to collect rent regardless of the economic condition of the cultivators; this caused immense misery and social tension among the latter. To a very great extent, the terms of the **revenue settlement** were also responsible for the **zamindars** adopting such an attitude; dates for depositing specified sums of revenue were fixed, failing which the **zamindars** were to lose their rights. Besides this, low levels of technology, lack of irrigation facilities and negligible use of fertilisers, all added up to aggravate the plight of the farmers and contributed to the dismal level of agricultural productivity. There was, of course, some evidence of a relatively higher yield of cash crops in certain areas of the country due to **commercialisation of agriculture**. But this could hardly help farmers in improving their economic condition as, instead of producing food crops, now they were producing cash crops which were to be ultimately used by British industries back home. Despite some progress made in irrigation, India's agriculture was starved of investment in terracing, flood-control, drainage and desalinisation of soil. While a small section of farmers changed their cropping pattern from food crops to commercial crops, a large section of tenants, small farmers and sharecroppers neither had resources and technology nor had incentive to invest in agriculture.

### Industrial Sector

As in the case of agriculture, so also in manufacturing, India could not develop a sound industrial base under the colonial rule. Even as the country's world famous handicraft industries declined, no corresponding modern industrial base was allowed to come up to take pride of place so long enjoyed by the former. The primary motive of the colonial government behind this policy of systematically de-industrialising India was two-fold. The intention was, first, to reduce India to the status of a mere exporter of important raw materials for the upcoming modern industries in Britain and, second, to turn India into a sprawling market for the finished products of those industries so that their continued expansion could be ensured to the maximum advantage of their home country — Britain. In the unfolding economic scenario, the decline of the indigenous handicraft industries created not only massive unemployment in India but also a new demand in the Indian consumer market, which was now deprived of the supply of locally made goods. This demand was profitably met by the increasing imports of cheap manufactured goods from Britain.

During the second half of the nineteenth century, modern industry began to take root in India but its progress remained very slow. Initially, this development was confined to the setting up of cotton and jute textile mills. The cotton textile mills, mainly dominated by Indians, were located in the western parts of the country, namely, Maharashtra and Gujarat, while the jute mills dominated by the foreigners were mainly concentrated in Bengal. Subsequently, the iron and steel industries began coming up in the beginning of the twentieth century. The Tata Iron and Steel Company (TISCO) was incorporated in 1907. A few other industries in the fields of sugar, cement, paper etc. came up after the Second World War.

However, there was hardly any **capital goods industry** to help promote further industrialisation in India. Capital goods industry means industries which can produce machine tools which are, in turn, used for producing articles for current consumption. The establishment of a few manufacturing units here and there was no substitute to the near wholesale displacement of the country's traditional handicraft industries. Furthermore, the growth rate of the new industrial sector and its contribution to the **Gross Domestic Product** (GDP) remained very small. Another significant drawback of the new industrial sector was the very limited area of operation of the public sector. This sector remained confined only to the railways, power generation, communications, ports and some other departmental undertakings.

### FOREIGN TRADE

India has been an important trading nation since ancient times. But the restrictive policies of commodity production, trade and tariff pursued by the colonial government adversely affected the structure, composition and volume of India's foreign trade. Consequently, India became an exporter of primary products such as raw silk, cotton, wool, sugar, indigo, jute etc. and an importer of finished consumer goods like cotton, silk and woollen clothes and capital goods like light machinery produced in the factories of Britain. For all practical purposes, Britain maintained a monopoly control over India's exports and imports. As a result, more than half of India's foreign trade was restricted to Britain while the rest was allowed with a



few other countries like China, Ceylon (Sri Lanka) and Persia (Iran). The opening of the Suez Canal further intensified British control over India's foreign trade. The most important characteristic of India's foreign trade throughout the colonial period was the generation of a large export surplus. But this surplus came at a huge cost to the country's economy. Several essential commodities—food grains, clothes, kerosene etc. — were scarcely available in the domestic market. Furthermore, this export surplus did not result in any flow of gold or silver into India. Rather, this was used to make payments for the expenses incurred by an office set up by the colonial government in Britain, expenses on war, again fought by the British government, and the import of invisible items, all of which led to the drain of Indian wealth.

### Demographic Condition

Various details about the population of British India were first collected through a census in 1881. Though suffering from certain limitations, it revealed the unevenness in India's population growth. Subsequently, every ten years such census operations were carried out. Before 1921, India was in the first stage of **demographic transition**.

**Trade Through the Suez Canal:** Suez Canal is an artificial waterway running from north to south across the Isthmus of Suez in north-eastern Egypt. It connects Port Said on the Mediterranean Sea with the Gulf of Suez, an arm of the Red Sea. The canal provides a direct trade route for ships operating between European or American ports and ports located in South Asia, East Africa and Oceania by doing away with the need to sail around Africa. Strategically and economically, it is one of the most important waterways in the world. Its opening in 1869 reduced the cost of transportation and made access to the Indian market easier.

The second stage of transition began after 1921. However, neither the total population of India nor the rate of population growth at this stage was very high. The various social development indicators were also not quite encouraging. The overall literacy level was less than 16 per cent. Out of this, the female literacy level was at a negligible low of about seven per cent. Public health facilities were either unavailable to large chunks of population or, when available, were highly inadequate. Consequently, water and air-borne diseases were rampant and took a huge toll on life. No wonder, the overall mortality rate was very high and in that, particularly, the **infant mortality rate** was quite alarming—about 218 per thousand in contrast to the present **mortality rate** of 63 per thousand. **Life expectancy** was also very low—32 years in contrast to the present 63 years. In the absence of reliable data, it is difficult to specify the extent of poverty at that time but there is no doubt that extensive poverty prevailed in India during the colonial period which contributed to the worsening profile of India's population of the time.

### Occupational Structure

During the colonial period, the occupational structure of India, i.e., distribution of working persons across different industries and sectors, showed little sign of change. The agricultural sector accounted for the largest share of workforce, which usually remained at a high of 70-75 per cent while the manufacturing and the services sectors accounted for only 10 and 15-20 per cent respectively. Another striking aspect was the growing regional variation. Parts of the then Madras Presidency (comprising areas of the present-day states of Tamil

Nadu, Andhra Pradesh, Kerala and Karnataka), Bombay and Bengal witnessed a decline in the dependence of the workforce on the agricultural sector with a commensurate increase in the manufacturing and the services sectors. However, there had been an increase in the share of workforce in agriculture during the same time in states such as Orissa, Rajasthan and Punjab.

### Infrastructure

Under the colonial regime, basic infrastructure such as railways, ports, water transport, posts and telegraphs did develop. However, the real motive behind this development was not to provide basic amenities to the people but to subserve various colonial interests. Roads constructed in India prior to the advent of the British rule were not fit for modern transport. The roads that were built primarily served the purposes of mobilising the army within India and drawing out raw materials from the countryside to the nearest railway station or the port to send these to far away England or other lucrative foreign destinations. There always remained an acute shortage of all-weather roads to reach out to the rural areas during the rainy season. Naturally, therefore, people mostly living in these areas suffered grievously during natural calamities and famines.

The British introduced the railways in India in 1850. The railways affected the structure of the Indian economy in two important ways. On the one hand it enabled people to undertake long distance travel and thereby break geographical and cultural barriers while, on the other hand, it fostered commercialisation of Indian agriculture which adversely affected the self-sufficiency of the village economies in India. The volume of India's exports undoubtedly expanded but its benefits rarely accrued to the Indian people.

The social benefits, which the Indian people gained owing to the introduction of the railways, were thus outweighed by the country's huge economic loss. Along with the development of roads and railways, the colonial dispensation also took measures for developing the inland trade and sea lanes.

However, these measures were far from satisfactory. The inland waterways, at times, also proved uneconomical as in the case of the Coast Canal on the Orissa coast. Though the canal was built at a huge cost to the government exchequer, yet, it failed to compete with the railways, which soon traversed the region running parallel to the canal, and had to be ultimately abandoned. The introduction of the expensive system of electric telegraph in India, similarly, served the purpose of maintaining law and order. The postal services, on the other hand, despite serving a useful public purpose, remained all through inadequate. You will learn more about the present status of various infrastructure in Chapter 8.

### Conclusion

By the time India won its independence, the impact of the two-century long British colonial rule was already showing on all aspects of the Indian economy. The agricultural sector was already saddled with surplus labour and extremely low productivity. The industrial sector was crying for modernisation, diversification, capacity building and increased public investment. Foreign trade was oriented to feed the Industrial Revolution in Britain. Infrastructure facilities, including the famed railway network, needed upgradation, expansion and public orientation. Prevalence of rampant poverty and unemployment required welfare

orientation of public economic policy. In a nutshell, the social and economic challenges before the country were enormous.

### Recap

An understanding of the economy before independence is necessary to know and appreciate the level of development achieved during the post-independence period. Under the colonial dispensation, the economic policies of the government were concerned more with the protection and promotion of British economic interests than with the need to develop the economic condition of the colonised country and its people. The agricultural sector continued to experience stagnation and deterioration despite the fact that the largest section of Indian population depended on it for sustenance. The rule of the British-India government led to the collapse of India's world famous handicraft industries without contributing, in any significant manner, to its replacement by a modern industrial base. Lack of adequate public health facilities, occurrence of frequent natural calamities and famines pauperised the hapless Indian people and resulted in engendering high mortality rates. Some efforts were made by the colonial regime to improve infrastructure facilities but these efforts were spiced with selfish motives. However, the independent Indian government had to build on this base through planning.

## Chapter 2 Indian Economy 1950-1990

- **Meaning of Planning**— Planning is a technique and a means to attain goals. These pre-determined goals are specially formulated by the central planning authority.
- **Characteristics of Economic Planning**— 1. Organisation system, 2. Maximum utilisation of Resources, 3. Applicable on the whole economy, 4. Central planning Authority, 5. Interference by the state, 6. Changes in the economy, 7. Long term process, 8. Pre-determined objectives, 9. Existence of valuation mechanism, 10. Achievement of objectives.
- **Plan period in India**— India has completed 12 Five Year Plans. Time Period of 12th Plan was 2012-2017.
- **Indian Planning Commission**— The Planning Commission of India was established on 15th March 1950, to evaluate the physical, capital and human resources and on this basis programmes for the Plan Development and its evaluation. The Planning Commission of India has now been dissolved in 2015 and replaced with National Institution for Transforming India (NITI) Aayog.
- **National Development Council (NDC)**— As an apex body to planning, it was constituted on 6th August 1952. No plan was implemented without its approval.
- **Objectives of Planning in India**— (i) Economic growth, (ii) Modernisation, (iii) Self-reliance, and (iv) Economic equity.
- **Achievements of Indian Plans**— 1. **Growth-Oriented Development Strategy (1951-65)**— In first plan, actual growth rate was higher than targeted. But in second and third plans, it was less than targeted. 2. **Equity Oriented Development Strategy (1966-90)**— There are two big achievements in the field of self-reliance. (i) India attained almost self-sufficiency in the field of food grains, and (ii) due to development of heavy engineering, machinery equipment, iron and steel and other capital goods industries, India become self-sufficient in machinery equipment and other capital

goods.

- **Failures of Economic Planning**— 1. Slow progress in per capita and national income, 2. Unemployment, 3. Increase in economic disparity, 4. Economic instability, 5. Failure in agriculture sector, 6. Failure in industrial sector, 7. Failure in resource mobilisation, 8. Dependence on foreign aid, 9. Defective regulatory policy.

- **Suggestions for the Success of Plans**— 1. Widespread mass participation, 2. Control on prices, 3. Co-ordination between public and private sector, 4. Integration between long term and short term programmes, 5. Physical achievements should be basis of success, 6. Encouragement of saving and investment, 7. Control on population growth, 8. Job oriented economic planning, 9. Coordination between capital intensive and consumption oriented industries, 10. Utilisation of human power, 11. Clean administration.

### Topic-3 Agriculture: Features, Problems and Policies

- During the colonial rule, there was neither growth nor equity in agriculture sector. The policy makers of independent India had to address these issues which they did through land reforms and promote the use of High Yielding Varieties of Seeds which ushered revolution in Indian agriculture.
- **Importance of Agriculture in Indian Economy**— 1. Main source of employment, 2. Contribution in National Income, 3. Base of industrialisation, 4. Base of economic development, 5. Importance in Foreign Trade, 6. Supply of food grains, 7. Contribution in revenue, 8. Dependence on trade and transport, 9. Capital formation, 10. Rainbow of revolution.
- **Characteristics of Indian Agriculture**— 1. Main source of livelihood, 2. Disguised and seasonal unemployment, 3. Labour intensive agriculture, 4. Excess dependence of agriculture on Monsoon, 5. Small size of land holdings, 6. Low level of productivity, 7. Old and defective agricultural production, 8. Pre-dominance of food crops.
- **Land Reforms**— Land reforms, primarily, refer to change in the ownership of holdings. It was done with the purpose of increasing agricultural production, the direct intervention of government in agrarian structure.
- **Need for Land Reforms**— (1). Retrograde agrarian structure and agrarian relation and 2. Small and fragmented agricultural holdings.
- **Land Reform Measures**— 1. Abolition of intermediaries, 2. Tenancy Reforms, 3. Re-organisation of agriculture.
- **Land Ceiling**: It was the policy which recommended the fixation of maximum size of land which would be owned by an individual. The purpose of land ceiling was to reduce the concentration of land ownership in a few hands.
- **Green Revolution**— Green Revolution implies the strategy related to improving production technique and productivity in agriculture.
- **Features of Green Revolution**— 1. High Yielding Varieties of seeds, 2. Extensive use of fertilisers, 3. Expansion of Irrigation facilities, 4. Plant protection, 5. Establishment of different institutions, 6. Agro-service centres, 7. Multiple cropping programme, 8. Mechanisation, 9. Scientific method of agriculture, 10. Development of agricultural land, 11. Improvement of animal husbandry, 12. Fixation of Minimum Support Prices.
- **Achievements of Green Revolution**— 1. Rise in

production and productivity, 2. Increase in income, 3. Increase in employment, 4. Rural prosperity, 5. Industry and agriculture relationship, 6. Innovation.

• **Economic Subsidies**— To assure availability of fertilizers to the farmers at reasonable price government is providing subsidy. A current debate is should subsidy continue or we may go without subsidy. Arguments are put forward both in favour and against subsidy.

#### Topic-4 Industries: Features, Problems and Policies

• In the Pre-British period, India was an industrially advanced country. But the British rule systematically destroyed the Indian industries. As a result, at the time of independence, India had a weak industrial base, poorly developed infrastructure and a stagnant economy.

• **Basic features of India's industrial development during Plan Period**— (1) Increase in industrial growth rate, (2) Increase in contribution of industrial sector in GDP, (3) Rapid development of basic industries, (4) Strong infrastructural base, (5) Import substitution, (6) Establishing enterprises with foreign assistance, (7) Increase in export of industrial products, (8) Establishment of financial Institution, (9) Development of information technology and electronics industries, (10) Development of small and cottage industries, (11) Dis-investment in public sector, (12) Development of food processing industry, and (13) Emergence of consultancy services.

• **Problems of Industrial Development in India**— (1) Problem of Energy, (2) High cost, (3) Shortage of capital, (4) Shortage of foreign exchange, (5) Lack of able entrepreneurs, (6) Irregular rate of industrial growth, (7) Unemployment problem ignored, (8) Industrial Unrest, (9) Small and medium sector neglected, (10) Problem of industrial sickness, (11) Less utilisation of installed capacity, (12) Regional disparity, (13) Increase in concentration of economic power, (14) Failure of public sector enterprises.

• **Measures to Encourage Industrial Development**— (1) Creation of economic and social infrastructure, (2) Development of entrepreneurial skill, (3) To ensure availability of capital, (4) Financial stability, (5) Rehabilitation of sick units, (6) Removal of control, (7) Human capital formation, (8) Modernisation, (9) Improvement in industrial relation, (10) Professionalisation of management, (11) Industrial Research.

• **Industrial Policy**— It refers to such formal declaration made by the Government which describes the general policies which will be adopted by the Governments towards the industries.

• **Industrial Policy Resolution, 1956**— (1) Classification of industries into public and private sectors, (2) Stress on the role of cottage and small scale industries, (3) Reduction in regional disparities, (4) Foreign Capital, (5) Facilities for labourers.

• **Industrial Licensing Policy**— Industrial licensing is an authority issued by the government organisation to permit the institutions for starting an industry or to start a function. In India it was started in 1952. The basis of this policy was Industries (Development and Regulation) Act 1951, and New Industrial Policy for 1991.

• **Public Sector Enterprises**— A public sector enterprise is that enterprise which is owned and managed by the government.

• **Characteristics of Public Enterprises**— (1) Public ownership, (2) Socio-economic objective, (3)

Accountability towards public, (4) Financing from government funding.

• **Role of Public Sector in Industrialisation**— (1) Contribution in National Income, (2) Contribution in Employment generation, (3) Contribution in Export, (4) Development of small scale sector, (5) Development of backward area, (6) Expansion of Technological base, (7) Help in achievement of self-sufficiency.

• **Problems of Public Sector**— (1) Bureaucratic Delays, (2) Lack of Technical efficiency, (3) Discriminating policy of organisation, (4) Lack of incentives, (5) Inadequate control of Parliament, (6) Lack of mutual co-operation, (7) Over capitalisation, (8) Operational and Managerial inadequacies, (9) Under utilisation of Production capacity, (10) Over-sized plants, (11) Take-over of sick units, (12) Long gestation period.

• **Suggestions for Reforms of Public Sector**— (1) Appropriate Pricing Policy, (2) Test of Efficiency, (3) Full utilisation of Production Capacity, (4) Quantitative determination of objectives, (5) Use of latest techniques, (6) Precautions in appointment of employees, (7) Competition, (8) Other suggestions.

• **Disinvestment in Public Sector**— It refers to the dilution of stake (claims) of the government in the equity of public sector undertaking so as to transfer the ownership rights to private hands.

• **Small Scale Sector in India— Cottage Industry**— These industries are mostly traditional, producing traditional products by employing traditional methods.

**Small Sector Industries**— These are defined in relation to capital investment in machines and buildings. Presently, this limit is 5 crores.

• **Role of Small Sector in Indian Economy**— (1) Provide Economic equality, (2) Production of artistic goods, (3) Protection from clan-struggle, (4) Need less technology, (5) Protection from bad effects of urbanisation and industrialisation, (6) Less dependency on imports, (7) Important place in country's exports.

• **Problems of Small Sector**— (1) Shortage of Capital, (2) Undeveloped production system, (3) Problem of raw material, (4) Lack of organised market, (5) Competition from large scale units, (6) Lack of education, (7) Lack of standardization, (8) Export neglected, (9) Dis-interest of consumers, (10) Non-Receipt of payments in time.

#### Topic-5 Foreign Trade of India: Features and Policies

• In the first seven plans, trade was characterised by what is commonly called an inward looking trade strategy. Technically, this policy is called Import Substitution Policy.

• **Role and Importance of Foreign Trade**— 1. Advantage of advance technology, 2. Increases consumption capacities, 3. Benefits to participating countries, 4. Increases production capacity, 5. Serves as a transmission belt for capital, 6. Creates fair competition.

• **Features of India's Foreign Trade**— 1. Increase in the value and volume of trade, 2. Increasing share in the gross national product, 3. Increasing share in the world trade, 4. Changes in the composition of exports, 5. Changes in the composition of import, 6. Export-Import ratio, 7. Changes in the direction of foreign trade, 8. Adverse balance of trade.

• **Problems of India's Foreign Trade**— 1. Adverse balance of trade, 2. Rapid increase in imports, 3. Comparatively lower growth in exports, 4. Increase in domestic demand, 5. Rising Prices, 6. Increasing foreign debt.



• **Foreign Trade Policy in India Import substitution in India**— It is a process to produce the alternate or close substitute of imported goods in the country itself.

**Need for Import Substitution**— 1. Scarcity of foreign exchange, 2. Un-favourable balance of Trade, 3. Devaluation of rupee, 4. Scarcity of foreign aid, 5. Shortage of essential commodities, 6. Need for industrial development, 7. Increase in self-sufficiency.

• **Export Promotion**— It is a process in which incentives are provided to old exporter and new entrepreneurs to increase the exportable surplus.

• **Export Promotion Policies - Pre-Reforms Period**— 1. Establishment of various organisations, 2. Export-Import bank, 3. Export processing zones, 4. Special economic zone, 5. Export promotion industrial park, 6. Export promotion capital goods, 7. Adoption of Liberalised Licensing System.

• **Foreign Trade Policy (2009-14)**— 1. DEPB extended till Dec. 2010, 2. Relaxation in export promotion of capital goods, 3. Tax refund scheme for Jewellery sector, 4. Single window scheme, 5. Re-export of unused leather, 6. Export units allowed to sell 90 percent of goods in domestic market, 7. Provision of dollar credits, 8. Addition of new markets and, 9. Zero duty under technology upgrade scheme.

## Introduction

On 15 August 1947, India woke to a new dawn of freedom. Finally we were masters of our own destiny after some two hundred years of British rule; the job of nation building was now in our own hands. The leaders of independent India had to decide, among other things, the type of **economic system** most suitable for our nation, a system which would promote the welfare of all rather than a few. There are different types of economic systems and among them, socialism appealed to Jawaharlal Nehru the most.

*Box 2.1: Types of Economic Systems*  
Every society has to answer three questions

**What goods and services should be produced in the country?**

**How should the goods and services be produced?**  
**Should producers use more human labour or more capital (machines) for producing things?**

**How should the goods and services be distributed among people?**

*One answer to these questions is to depend on the market forces of supply and demand. In a market economy, also called capitalism, only those consumer goods will be produced that are in demand, i.e., goods that can be sold profitably either in the domestic or in the foreign markets. If cars are in demand, cars will be produced and if bicycles are in demand, bicycles will be produced. If labour is cheaper than capital, more labour-intensive methods of production will be used and vice-versa. In a capitalist society the goods produced are distributed among people not on the basis of what people need but on the basis of Purchasing Power—the ability to buy goods and services. That is, one has to have the money in the pocket to buy it. Low cost housing for the poor is much needed but will not count as demand in the market sense because the poor do not have the purchasing power to back the demand. As a result this commodity will not be produced and supplied as per market forces. Such a society did not appeal to Jawaharlal Nehru, our first prime minister, for it meant that the great majority of people of the country would be left behind without the chance to improve their quality of life.*

*A socialist society answers the three questions in a totally different manner. In a socialist society the government decides what goods are to be produced in accordance with the needs of society. It is assumed that the government knows what is good for the people of the country and so the desires of individual consumers are not given much importance. The government decides how goods are to be produced and how they should be distributed. In principle, distribution under socialism is supposed to be based on what people need and not on what they can afford to purchase. Unlike under capitalism, for example, a socialist nation provides free health care to all its citizens. Strictly, a socialist society has no private property since everything is owned by the state. In Cuba and China, for example, most of the economic activities are governed by the socialistic principles.*

*Most economies are mixed economies, i.e. the government and the market together answer the three questions of what to produce, how to produce and how to distribute what is produced. In a mixed economy, the market will provide whatever goods and services it can produce well, and the government will provide essential goods and services which the market fails to do.*

However, he was not in favour of the kind of socialism established in the former Soviet Union where all the means of production, i.e. all the factories and farms in the country, were owned by the government. There was no private property. It is not possible in a democracy like India for the government to change the ownership pattern of land and other properties of its citizens in the way that it was done in the former Soviet Union.

Nehru, and many other leaders and thinkers of the newly independent India, sought an alternative to the extreme versions of capitalism and socialism. Basically sympathising with the socialist outlook, they found the answer in an economic system which, in their view, combined the best features of socialism without its drawbacks. In this view, India would be a socialist society with a strong public sector but also with private property and democracy; the government would plan for the economy with the private sector being encouraged to be part of the plan effort. The 'Industrial Policy Resolution' of 1948 and the Directive Principles of the Indian Constitution reflected this outlook. In 1950, the **Planning Commission** was set up with the Prime Minister as its Chairperson. The era of five year plans had begun.

*What is a Plan? A plan spells out how the resources of a nation should be put to use. It should have some general goals as well as specific objectives which are to be achieved within a specified period of time; in India plans are of five years duration and are called five year plans (we borrowed this from the former Soviet Union, the pioneer in national planning). Our plan documents not only specify the objectives to be attained in the five years of a plan but also what is to be achieved over a period of twenty years. This long-term plan is called 'perspective plan'. The five year plans are supposed to provide the basis for the perspective plan. It will be unrealistic to expect all the goals of a plan to be given equal importance in all the plans. In fact the goals may actually be in conflict. For example, the goal of introducing modern technology may be in conflict with the goal of increasing employment if the technology reduces the need for labour. The planners have to balance the goals, a very difficult job indeed. We find different goals being emphasised in different plans in India. Our five year plans do not spell out how much of*

*each and every good and service is to be produced. This is neither possible nor necessary (the former Soviet Union tried to do this and failed). It is enough if the plan is specific about the sectors where it plays a commanding role, for instance, power generation and irrigation, while leaving the rest to the market.*

### The Goals of Five Year Plans

A plan should have some clearly specified goals. The goals of the five year plans are: growth, modernisation, self-reliance and equity. This does not mean that all the plans have given equal importance to all these goals. Due to limited resources, a choice has to be made in each plan about which of the goals is to be given primary importance. Nevertheless, the planners have to ensure that, as far as possible, the policies of the plans do not contradict these four goals. Let us now learn about the goals of planning in some detail.

#### Growth:

It refers to increase in the country's capacity to produce the output of goods and services within the country. It implies either a larger stock of productive capital, or a larger size of supporting services like transport and banking, or an increase in the efficiency of productive capital and services. A good indicator of economic growth, in the language of economics, is steady increase in the Gross Domestic Product (GDP). The GDP is the market value of all the goods and services produced in the country during a year. You can think of the GDP as a cake and growth is increase in the size of the cake. If the cake is larger, more people can enjoy it. It is necessary to produce more goods and services if the people of India are to enjoy (in the words of the First Five Year Plan) a more rich and varied life.

The GDP of a country is derived from the different sectors of the economy, namely the agricultural sector, the industrial sector and the service sector. The contribution made by each of these sectors makes up the **structural composition** of the economy. In some countries, growth in agriculture contributes more to the GDP growth, while in some countries the growth in the service sector contributes more to GDP growth.

**The Service Sector:** As a country develops, it undergoes 'structural change'. In the case of India, the structural change is peculiar. Usually, with development, the share of agriculture declines and the share of industry becomes dominant. At higher levels of development, the service sector contributes more to the GDP than the other two sectors. In India, the share of agriculture in the GDP was more than 50 per cent—as we would expect for a poor country. But by 1990 the share of the service sector was 40.59 per cent, more than that of agriculture or industry, like what we find in developed nations. This phenomenon of growing share of the service sector was accelerated in the post 1991 period (this marked the onset of globalisation in the country which will be discussed in a subsequent chapter).

#### Modernisation:

To increase the production of goods and services the producers have to adopt new technology. For example, a farmer can increase the output on the farm by using new seed varieties instead of using the old ones. Similarly, a factory can increase output by using a new type of machine. Adoption of new technology is called modernisation.

However, modernisation does not refer only to the use of new technology but also to changes in social outlook such as the recognition that women should have the

same rights as men. In a traditional society, women are supposed to remain at home while men work. A modern society makes use of the talents of women in the work place — in banks, factories, schools etc. — and such a society in most occasions is also prosperous.

#### Self-reliance:

A nation can promote economic growth and modernisation by using its own resources or by using resources imported from other nations. The first seven five year plans gave importance to self-reliance which means avoiding imports of those goods which could be produced in India itself. This policy was considered a necessity in order to reduce our dependence on foreign countries, especially for food. It is understandable that people who were recently freed from foreign domination should give importance to self-reliance. Further, it was feared that dependence on imported food supplies, foreign technology and foreign capital may make India's sovereignty vulnerable to foreign interference in our policies.

#### Equity

Now growth, modernisation and self-reliance, by themselves, may not improve the kind of life which people are living. A country can have high growth, the most modern technology developed in the country itself, and also have most of its people living in poverty. It is important to ensure that the benefits of economic prosperity reach the poor sections as well instead of being enjoyed only by the rich. So, in addition to growth, modernisation and self-reliance, equity is also important. Every Indian should be able to meet his or her basic needs such as food, a decent house, education and health care and inequality in the distribution of wealth should be reduced.

Let us now see how the first seven five year plans, covering the period 1950-1990, attempted to attain these four goals and the extent to which they succeeded in doing so, with reference to agriculture, industry and trade. You will study the policies and developmental issues taken up after 1991 in Chapter 3.

### Agriculture

You have learnt in Chapter 1

that during the colonial rule there was neither growth nor equity in the agricultural sector. The policy makers of independent India had to address these issues which they did through land reforms and promoting the use of 'High Yielding Variety' (HYV) seeds which ushered in a revolution in Indian agriculture.

**Land Reforms:** At the time of independence, the land tenure system was characterised by intermediaries (variously called zamindars, jagirdars etc.) who merely collected rent from the actual tillers of the soil without contributing towards improvements on the farm. The low productivity of the agricultural sector forced India to import food from the United States of America (U.S.A.). Equity in agriculture called for land reforms which primarily refer to change in the ownership of landholdings. Just a year after independence, steps were taken to abolish intermediaries and to make the tillers the owners of land. The idea behind this move was that ownership of land would give incentives to the tillers to invest in making improvements provided sufficient capital was made available to them.

**Ownership and Incentives:** The policy of 'land to the tiller' is based on the idea that the cultivators will take more interest—they will have more incentive—in increasing output if they are the owners of the land. This

is because ownership of land enables the tiller to make profit from the increased output. Tenants do not have the incentive to make improvements on land since it is the landowner who would benefit more from higher output. The importance of ownership in providing incentives is well illustrated by the carelessness with which farmers in the former Soviet Union used to pack fruits for sale. It was not uncommon to see farmers packing rotten fruits along with fresh fruits in the same box. Now, every farmer knows that the rotten fruits will spoil the fresh fruits if they are packed together. This will be a loss to the farmer since the fruits cannot be sold. So why did the Soviet farmers do something which would so obviously result in loss for them? The answer lies in the incentives facing the farmers. Since farmers in the former Soviet Union did not own any land, they neither enjoyed the profits nor suffered the losses. In the absence of ownership, there was no incentive on the part of farmers to be efficient, which also explains the poor performance of the agricultural sector in the Soviet Union despite availability of vast areas of highly fertile land.

Land ceiling was another policy to promote equity in the agricultural sector. This means fixing the maximum size of land which could be owned by an individual. The purpose of land ceiling was to reduce the concentration of land ownership in a few hands.

The abolition of intermediaries meant that some 200 lakh tenants came into direct contact with the government — they were thus freed from being exploited by the zamindars. The ownership conferred on tenants gave them the incentive to increase output and this contributed to growth in agriculture. However, the goal of equity was not fully served by abolition of intermediaries. In some areas the former zamindars continued to own large areas of land by making use of some loopholes in the legislation; there were cases where tenants were evicted and the landowners claimed to be self-cultivators (the actual tillers), claiming ownership of the land; and even when the tillers got ownership of land, the poorest of the agricultural labourers (such as sharecroppers and landless labourers) did not benefit from land reforms.

The land ceiling legislation also faced hurdles. The big landlords challenged the legislation in the courts, delaying its implementation. They used this delay to register their lands in the name of close relatives, thereby escaping from the legislation. The legislation also had a lot of loopholes which were exploited by the big landholders to retain their land. Land reforms were successful in Kerala and West Bengal because these states had governments committed to the policy of land to the tiller. Unfortunately other states did not have the same level of commitment and vast inequality in landholding continues to this day.

**The Green Revolution:** At independence, about 75 per cent of the country's population was dependent on agriculture. Productivity in the agricultural sector was very low because of the use of old technology and the absence of required infrastructure for the vast majority of farmers. India's agriculture vitally depends on the monsoon and if the monsoon fell short the farmers were in trouble unless they had access to irrigation facilities which very few had. The stagnation in agriculture during the colonial rule was permanently broken by the green revolution. This refers to the large increase in production of food grains resulting from the use of high yielding variety (HYV) seeds especially for wheat and rice. The use of these seeds required the use of fertiliser

and pesticide in the correct quantities as well as regular supply of water; the application of these inputs in correct proportions is vital. The farmers who could benefit from HYV seeds required reliable irrigation facilities as well as the financial resources to purchase fertiliser and pesticide. As a result, in the first phase of the green revolution (approximately mid 1960s upto mid 1970s), the use of HYV seeds was restricted to the more affluent states such as Punjab, Andhra Pradesh and Tamil Nadu. Further, the use of HYV seeds primarily benefited the wheat-growing regions only. In the second phase of the green revolution (mid-1970s to mid-1980s), the HYV technology spread to a larger number of states and benefited more variety of crops. The spread of green revolution technology enabled India to achieve self-sufficiency in food grains; we no longer had to be at the mercy of America, or any other nation, for meeting our nation's food requirements.

Growth in agricultural output is important but it is not enough. If a large proportion of this increase is consumed by the farmers themselves instead of being sold in the market, the higher output will not make much of a difference to the economy as a whole. If, on the other hand, a substantial amount of agricultural produce is sold in the market by the farmers, the higher output can make a difference to the economy. The portion of agricultural produce which is sold in the market by the farmers is called marketed surplus. A good proportion of the rice and wheat produced during the green revolution period (available as marketed surplus) was sold by the farmers in the market. As a result, the price of food grains declined relative to other items of consumption. The low-income groups, who spend a large percentage of their income on food, benefited from this decline in relative prices. The green revolution enabled the government to procure sufficient amount of food grains to build a stock which could be used in times of food shortage.

While the nation had immensely benefited from the green revolution, the technology involved was not free from risks. One such risk was the possibility that it would increase the disparities between small and big farmers—since only the big farmers could afford the required inputs, thereby reaping most of the benefits of the green revolution. Moreover, the HYV crops were also more prone to attack by pests and the small farmers who adopted this technology could lose everything in a pest attack.

Fortunately, these fears did not come true because of the steps taken by the government. The government provided loans at a low interest rate to small farmers and subsidised fertilisers so that small farmers could also have access to the needed inputs. Since the small farmers could obtain the required inputs, the output on small farms equalled the output on large farms in the course of time. As a result, the green revolution benefited the small as well as rich farmers. The risk of the small farmers being ruined when pests attack their crops was considerably reduced by the services rendered by research institutes established by the government. You should note that the green revolution would have favoured the rich farmers only if the state did not play an extensive role in ensuring that the small farmer also gains from the new technology.

**The Debate Over Subsidies:** The economic justification of subsidies in agriculture is, at present, a hotly debated question. It is generally agreed that it was necessary to use subsidies to provide an incentive for adoption of the new HYV technology by farmers in



general and small farmers in particular. Any new technology will be looked upon as being risky by farmers. Subsidies were, therefore, needed to encourage farmers to test the new technology. Some economists believe that once the technology is found profitable and is widely adopted, subsidies should be phased out since their purpose has been served. Further, subsidies are meant to benefit the farmers but a substantial amount of fertiliser subsidy also benefits the fertiliser industry; and among farmers, the subsidy largely benefits the farmers in the more prosperous regions. Therefore, it is argued that there is no case for continuing with fertiliser subsidies; it does not benefit the target group and it is a huge burden on the government's finances.

On the other hand, some believe that the government should continue with agricultural subsidies because farming in India continues to be a risky business. Most farmers are very poor and they will not be able to afford the required inputs without subsidies. Eliminating subsidies will increase the inequality between rich and poor farmers and violate the goal of equity. These experts argue that if subsidies are largely benefiting the fertiliser industry and big farmers, the correct policy is not to abolish subsidies but to take steps to ensure that only the poor farmers enjoy the benefits.

Thus, by the late 1960s, Indian agricultural productivity had increased sufficiently to enable the country to be self-sufficient in food grains. This is an achievement to be proud of. On the negative side, some 65 per cent of the country's population continued to be employed in agriculture even as late as 1990. Economists have found that as a nation becomes more prosperous, the proportion of GDP contributed by agriculture as well as the proportion of population working in the sector declines considerably. In India, between 1950 and 1990, the proportion of GDP contributed by agriculture declined significantly but not the population depending on it (67.5 per cent in 1950 to 64.9 per cent by 1990). Why was such a large proportion of the population engaged in agriculture although agricultural output could have grown with much less people working in the sector? The answer is that the industrial sector and the service sector did not absorb the people working in the agricultural sector. Many economists call this an important failure of our policies followed during 1950-1990.

## Industry and Trade

Economists have found that poor nations can progress only if they have a good industrial sector. Industry provides employment which is more stable than the employment in agriculture; it promotes modernisation and overall prosperity. It is for this reason that the five year plans place a lot of emphasis on industrial development. You might have studied in the previous chapter that, at the time of independence, the variety of industries was very narrow — largely confined to cotton textiles and jute. There were two well-managed iron and steel firms — one in Jamshedpur and the other in Kolkata — but, obviously, we needed to expand the industrial base with a variety of industries if the economy was to grow.

**Public and Private Sectors in Indian Industrial Development:** The big question facing the policy makers was — what should be the role of the government and the private sector in industrial development? At the time of independence, Indian industrialists did not have the capital to undertake investment in industrial ventures required for the

development of our economy; nor was the market big enough to encourage industrialists to undertake major projects even if they had the capital to do so. It is principally for these reasons that the state had to play an extensive role in promoting the industrial sector. In addition, the decision to develop the Indian economy on socialist lines led to the policy of the state controlling the commanding heights of the economy, as the Second Five Year plan put it. This meant that the state would have complete control of those industries that were vital for the economy. The policies of the private sector would have to be complimentary to those of the public sector, with the public sector leading the way.

**Industrial Policy Resolution 1956 (IPR 1956):** In accordance with the goal of the state controlling the commanding heights of the economy, the Industrial Policy Resolution of 1956 was adopted. This resolution formed the basis of the Second Five Year Plan, the plan which tried to build the basis for a socialist pattern of society. This resolution classified industries into three categories. The first category comprised industries which would be exclusively owned by the state; the second category consisted of industries in which the private sector could supplement the efforts of the state sector, with the state taking the sole responsibility for starting new units; the third category consisted of the remaining industries which were to be in the private sector.

Although there was a category of industries left to the private sector, the sector was kept under state control through a system of licenses. No new industry was allowed unless a license was obtained from the government. This policy was used for promoting industry in backward regions; it was easier to obtain a license if the industrial unit was established in an economically backward area. In addition, such units were given certain concessions such as tax benefits and electricity at a lower tariff. The purpose of this policy was to promote regional equality.

Even an existing industry had to obtain a license for expanding output or for diversifying production (producing a new variety of goods). This was meant to ensure that the quantity of goods produced was not more than what the economy required. License to expand production was given only if the government was convinced that the economy required a larger quantity of goods.

**Small-Scale Industry:** In 1955, the Village and Small-Scale Industries Committee, also called the Karve Committee, noted the possibility of using small-scale industries for promoting rural development. A 'small-scale industry' is defined with reference to the maximum investment allowed on the assets of a unit. This limit has changed over a period of time. In 1950 a small-scale industrial unit was one which invested a maximum of rupees five lakh; at present the maximum investment allowed is rupees one crore.

It is believed that small-scale industries are more 'labour intensive' i.e., they use more labour than the large-scale industries and, therefore, generate more employment. But these industries cannot compete with the big industrial firms; it is obvious that development of small-scale industry requires them to be shielded from the large firms. For this purpose, the production of a number of products was reserved for the small-scale industry; the criterion of reservation being the ability of these units to manufacture the goods. They were also given concessions such as lower excise duty and bank loans at lower interest rates.

The industrial policy that we adopted was closely related to the trade policy. In the first seven plans, trade was characterised by what is commonly called an inward looking trade strategy. Technically, this strategy is called import substitution. This policy aimed at replacing or substituting imports with domestic production. For example, instead of importing vehicles made in a foreign country, industries would be encouraged to produce them in India itself. In this policy the government protected the domestic industries from foreign competition. Protection from imports took two forms: tariffs and quotas. Tariffs are a tax on imported goods; they make imported goods more expensive and discourage their use. Quotas specify the quantity of goods which can be imported. The effect of tariffs and quotas is that they restrict imports and, therefore, protect the domestic firms from foreign competition. The policy of protection is based on the notion that industries of developing countries are not in a position to compete against the goods produced by more developed economies. It is assumed that if the domestic industries are protected they will learn to compete in the course of time. Our planners also feared the possibility of foreign exchange being spent on import of luxury goods if no restrictions were placed on imports. Nor was any serious thought given to promote exports until the mid-1980s.

**Effect of Policies on Industrial Development:** The achievements of India's industrial sector during the first seven plans are impressive indeed. The proportion of GDP contributed by the industrial sector increased in the period from 11.8 per cent in 1950-51 to 24.6 per cent in 1990-91. The rise in the industry's share of GDP is an important indicator of development. The six per cent annual growth rate of the industrial sector during the period is commendable. No longer was Indian industry restricted largely to cotton textiles and jute; in fact, the industrial sector became well diversified by 1990, largely due to the public sector. The promotion of small-scale industries gave opportunities to those people who did not have the capital to start large firms to get into business. Protection from foreign competition enabled the development of indigenous industries in the areas of electronics and automobile sectors which otherwise could not have developed.

In spite of the contribution made by the public sector to the growth of the Indian economy, some economists are critical of the performance of many public sector enterprises. It was proposed at the beginning of this chapter that initially public sector was required in a big way. It is now widely held that state enterprises continued to produce certain goods and services (often monopolising them) although this was no longer required. An example is the provision of telecommunication service. This industry continued to be reserved for the Public Sector even after it was realised that private sector firms could also provide it. Due to the absence of competition, even till the late 1990s, one had to wait for a long time to get a telephone connection.

Another instance could be the establishment of Modern Bread, a bread-manufacturing firm, as if the private sector could not manufacture bread! In 2001 this firm was sold to the private sector. The point is that after four decades of Planned development of Indian Economy no distinction was made between (i) what the public sector alone can do and (ii) what the private sector can also do. For example, even now only the public sector supplies national defense. And even though the private sector

can manage hotels well, yet, the government also runs hotels. This has led some scholars to argue that the state should get out of areas which the private sector can manage and the government may concentrate its resources on important services which the private sector cannot provide.

Many public sector firms incurred huge losses but continued to function because it is difficult to close a government undertaking even if it is a drain on the nation's limited resources. This does not mean that private firms are always profitable (indeed, quite a few of the public sector firms were originally private firms which were on the verge of closure due to losses; they were then nationalised to protect the jobs of the workers). However, a loss-making private firm will not waste resources by being kept running despite the losses.

The need to obtain a license to start an industry was misused by industrial houses; a big industrialist would get a license not for starting a new firm but to prevent competitors from starting new firms. The excessive regulation of what came to be called the permit license raj prevented certain firms from becoming more efficient. More time was spent by industrialists in trying to obtain a license or lobby with the concerned ministries rather than on thinking about how to improve their products.

The protection from foreign competition is also being criticised on the ground that it continued even after it proved to do more harm than good. Due to restrictions on imports, the Indian consumers had to purchase whatever the Indian producers produced. The producers were aware that they had a captive market; so they had no incentive to improve the quality of their goods. Why should they think of improving quality when they could sell low quality items at a high price? Competition from imports forces our producers to be more efficient.

A few economists also point out that the public sector is not meant for earning profits but to promote the welfare of the nation. The public sector firms, on this view, should be evaluated on the basis of the extent to which they contribute to the welfare of people and not on the profits they earn. Regarding protection, some economists hold that we should protect our producers from foreign competition as long as the rich nations continue to do so. Owing to all these conflicts, economists called for a change in our policy. This, alongwith other problems, led the government to introduce a new economic policy in 1991.

The progress of the Indian economy during the first seven plans was impressive indeed. Our industries became far more diversified compared to the situation at independence. India became self-sufficient in food production thanks to the green revolution. Land reforms resulted in abolition of the hated zamindari system. However, many economists became dissatisfied with the performance of many public sector enterprises. Excessive government regulation prevented growth of entrepreneurship. In the name of self-reliance, our producers were protected against foreign competition and this did not give them the incentive to improve the quality of goods that they produced. Our policies were 'inward oriented' and so we failed to develop a strong export sector. The need for reform of economic policy was widely felt in the context of changing global economic scenario, and the new economic policy was initiated in 1991 to make our economy more efficient. This is the subject of the next chapter.

**Recap:** After independence, India envisaged an economic system which combines the best features of socialism and capitalism—this culminated in the mixed economy model. All the economic planning has been formulated through five year plans. Common goals of five year plans are growth, modernisation, self-sufficiency and equity. The major policy initiatives in agriculture sector were land reforms and green revolution. These initiatives helped India to become self-sufficient in food grains production. The proportion of people depending on agriculture did not decline as expected. Policy initiatives in the industrial sector raised its contribution to GDP. One of the major drawbacks in the industrial sector was the inefficient functioning of the public sector as it started incurring losses leading to drain on the nation's limited resources.

## Chapter 3 Liberalisation, Privatisation And Globalisation: An Appraisal

### Topic-6 Economic Reforms in India

- New Economic Policy (NEP) refers to the efforts made through different policy decisions and changes that were made to create competitive environment and increase in productivity and efficiency.

- **Need for Economic Reforms— (A) Problems facing Economy—** (i) Unsatisfactory performance of public sector, (ii) High rate of inflation, (iii) Increasing debt burden, (iv) Problem of balance of payment. **(B) Immediate crisis—** (i) Gulf crisis, (ii) Inadequate Foreign Exchange Reserves.

- **Main components of New Economic Policy—** (i) New Industrial Policy, (ii) New trade policy, (iii) New fiscal policy, (iv) New monetary policy, (v) New investment policy, (vi) Globalisation of finance.

- **Main Phases of New Economic Policy—** (i) Liberalisation, (ii) Privatisation, and (iii) Globalisation.

- **Meaning of Liberalisation—** Liberalisation means removing all unnecessary controls and restrictions like permits, licenses, protectionist duties, etc., imposed by the government.

- **Measures adopted for Liberalisation— (A) Soft Liberalisation policy (1985-1991)—** The era of liberalisation started with the period of Rajiv Gandhi, the then Prime Minister, in 1985. In this period of modernization, a large number of incentives and exemptions were granted. **(B) Extensive Liberalisation Policy [After 1991 period]—** (i) Liberalised licensing policy, (ii) Expansion of industries, (iii) Concession from Monopolies, (iv) Extending investment limits for small industries, (v) Free import of machinery and Raw materials, (vi) Freedom to import technology, (vii) Freedom to financial institution, (viii) Reduction in Tax rates.

- **Meaning of Privatisation—** Transfer of ownership from government to private sector of organisations which are presently run and controlled by government.

- **Measures of Privatisation— (A) Ownership Measures—** (i) Total Denationalisation, (ii) Joint venture. **(B) Organisational Measures—** (i) Holding company, (ii) Leasing, (iii) Disinvestment.

- **Factors encouraging privatisation in India—** (i) New Economic reforms programmes, (ii) Increasing debt burden on government, (iii) Presence of foreign companies, (iv) To make Indian companies more competitive, (v) Broad base for increasing production.

- **Steps of Indian Economy towards privatisation—**

- (i) Contraction of Public sector, (ii) Participation of private sector, (iii) Abolition of Industrial licensing, (iv) Improvement by MOU, (v) Re-organisation of public sector, (vi) Disinvestment of equity of public sector, (vii) Establishment of National Renewable fund, (viii) Removal of investment control on big houses, (ix) Policy related to sick units, (x) Sale of shares of public sector undertaking.

- **Arguments in favour of Privatisation—** Reduction in Budgetary Deficit, (ii) Less political intervention, (iii) Improvement in economic efficiency and technical efficiency, (iv) Increased accountability, (v) Globalisation of economy, (vi) Sources of new job, (vii) Increase in industrial growth, (viii) Increase in foreign investment, (ix) In line with international trade, (x) Encouragement to new Inventions.

- **Arguments Against Privatisation—** (i) Concentration of economic power, (ii) Substitution of monopoly power, (iii) Lop-sided development of industries, (iv) Industrial sickness, (v) Entry of multinationals, (vi) No safety for the weaker sections, (vii) Social institutions, (viii) Corruption.

- **Globalisation—** Globalisation means integrating the economy of the country with the world economy.

- **Factors fostering Globalisation in India—** (i) Technical changes, (ii) Competition, (iii) Liberalisation policies, (iv) Emergence of United states as a super power, (v) Experiences of Developing countries, (vi) Other factors.

- **Effects of Globalisation— (A) Favourable Effects—** (i) Increasing share of exports in world trade, (ii) Favourable effect on Export-Import Ratio, (iii) Application of high technology, (iv) Stable and strong exchange rate. **(B) Adverse Effects—** (i) Decrease in Revenue of Indian Industries, (ii) Increasing share in capital and management by foreign entrepreneurs, (iii) Increasing Regional disparities, (iv) Export of Profit.

- **Suggestions Regarding Globalisation—** (i) Improvement in Competitiveness of Indian producers, (ii) Alliance with MNCs, (iii) Self-sufficiency in Technology, (iv) Facing International protectionism, and (v) Modernisation of Agriculture and small sector.

- **Outsourcing—** Outsourcing means obtaining goods and services by contract from an outside source.

- **World Trade Organisation—** From January 1, 1995, WTO has been working. It was replaced the GATT. The objective of WTO was free trade in order to help in the growth and development of all member countries. The WTO acts as a permanent watch dog of international trade.

- **Achievements of LPG Policies—** (i) Rise in GDP growth, (ii) Rise in Foreign exchange reserves, (iii) Control of inflation, (iv) Rise in flow of foreign capital, (v) Rise in competitiveness of industrial sector, (vi) Rise in integration with the world economy.

- **Demonetisation—** It is the process of stripping a currency unit from its status as legal tender in the country.
- Demonetisation results in change in national currency.
- The present currency in circulation is pulled off and new currency is circulated.

- **Types of Demonetisation** (i) Total Demonetisation (ii) Partial Demonetisation

- **Purposes sought by Demonetisation** (i) Stripping corruption (ii) Combating inflation (iii) Curbing counterfeit currency (iv) Combating tax evasion (v) Increasing performance of economy

- **History of Demonetisation in India.** (i) On 12/01/1946 - all notes of denominations of ₹500 and ₹1000



were demonetised with a time limit of 10 days to exchange demonetised notes. Its purpose was to catch tax evaders. (ii) On 16/01/1978 - all notes of denominations of ₹1000, ₹5000 and ₹10000 were demonetised with a time limit of 3 days to exchange demonetised notes. Its purpose was to catch corrupt leaders and officials in predecessor governments. (iii) On 08/11/2016 - all notes of denominations of ₹500 and ₹1000 were demonetised with a time limit of 50 days to exchange demonetised notes from banks and some essential service stores.

- **Demonetisation of 2016** (i) On 8 November 2016, the Government of India announced the demonetisation of all ₹500 and ₹1000 banknotes of the Mahatma Gandhi Series. (ii) ₹500 (new series) and ₹2000 notes were introduced. (iii) 50 days' time limit given for exchange of demonetised notes. (iv) Limits were put on exchange per day and withdrawal per day (and week) during this time. (v) Mixed reaction by public but strongly criticized by Opposition.

- **Effects of 2016 Demonetisation** (i) Pushed India towards cashless economy (ii) Raised tax payments (iii) Brought an end to black money (iv) Curbed terrorist funding (v) Curbed effect on growth and revenues of MSMEs

- **Goods and Service Tax (GST)**

- **Objectives of GST** (i) To eliminate the cascading impact of taxes on production and distribution cost of goods and services, (ii) Streamlining indirect tax regime (iii) Growth of Revenue in States and Union Territories (iv) Reduction in transaction costs and unnecessary wastages (v) Elimination of the multiplicity of taxation (vi) One Point Single Tax (vii) Reduction in average tax burdens (viii) Reduction in the corruption

- **Types of GST laws** (i) At a centre level called 'Central GST (CGST)' (ii) At the state level - 'State GST (SGST)'.

- **Benefits of GST** (i) GST provides comprehensive and wider coverage of input credit setoff, you can use service tax credit for the payment of tax on sale of goods etc. (ii) Many indirect taxes in state and central level have been included by GST. You need to pay a single GST instead of all. (iii) Uniformity of tax rates across the states. (iv) Ensure better compliance due to aggregate tax rate reduction. (v) By reducing the tax burden, the competitiveness of Indian products in international market has increased and there by development of the nation. (vi) Prices of goods are expected to reduce in the long run as the benefits of less tax burden would be passed on to the consumer.

After forty years of planned development, India has been able to achieve a strong industrial base and became self-sufficient in the production of food grains. Nevertheless, a major segment of the population continues to depend on agriculture for its livelihood. In 1991, a crisis in the balance of payments led to the introduction of economic reforms in the country. This unit is an appraisal of the reform process and its implications for India.

In 1991, India met with an economic crisis relating to its external debt — the government was not able to make repayments on its borrowings from abroad; **foreign exchange** reserves, which we generally maintain to import petrol and other important items, dropped to levels that were not sufficient for even a fortnight. The crisis was further compounded by rising prices of essential goods. All these led the government to introduce a new set of policy measures which changed the direction of our developmental strategies. In this chapter, we will look at the background of the crisis,

measures that the government has adopted and their impact on various sectors of the economy.

## Background

The origin of the financial crisis can be traced from the inefficient management of the Indian economy in the 1980s. We know that for implementing various policies and its general administration, the government generates funds from various sources such as taxation, running of public sector enterprises etc. When expenditure is more than income, the government borrows to finance the **deficit** from banks and also from people within the country and from international **financial institutions**. When we import goods like petroleum, we pay in dollars which we earn from our exports.

Development policies required that even though the revenues were very low, the government had to overshoot its revenue to meet problems like unemployment, poverty and population explosion. The continued spending on development programmes of the government did not generate additional revenue. Moreover, the government was not able to generate sufficiently from internal sources such as taxation. When the government was spending a large share of its income on areas which do not provide immediate returns such as the social sector and defence, there was a need to utilise the rest of its revenue in a highly efficient manner. The income from public sector undertakings was also not very high to meet the growing expenditure. At times, our foreign exchange, borrowed from other countries and international financial institutions, was spent on meeting consumption needs. Neither was an attempt made to reduce such profligate spending nor sufficient attention was given to boost exports to pay for the growing imports.

In the late 1980s, government expenditure began to exceed its revenue by such large margins that meeting the expenditure through borrowings became unsustainable. Prices of many essential goods rose sharply. Imports grew at a very high rate without matching growth of exports. As pointed out earlier, **foreign exchange** reserves declined to a level that was not adequate to finance imports for more than two weeks. There was also not sufficient foreign exchange to pay the interest that needs to be paid to international lenders. Also no country or international funder was willing to lend to India.

**India approached the International Bank for Reconstruction and Development (IBRD)**, popularly known as **World Bank** and the **International Monetary Fund (IMF)**, and received \$7 billion as loan to manage the crisis. For availing the loan, these international agencies expected India to liberalise and open up the economy by removing restrictions on the private sector, reduce the role of the government in many areas and remove trade restrictions between India and other countries.

India agreed to the conditionalities of World Bank and IMF and announced the **New Economic Policy (NEP)**. The NEP consisted of wide ranging economic reforms. The thrust of the policies was towards creating a more competitive environment in the economy and removing the barriers to entry and growth of firms. This set of policies can broadly be classified into two groups: the stabilisation measures and the structural reform measures. Stabilisation measures are short-term measures, intended to correct some of the weaknesses that have developed in the **balance of payments** and to bring **inflation** under control. In simple words, this

means that there was a need to maintain sufficient foreign exchange reserves and keep the rising prices under control. On the other hand, structural reform policies are long-term measures, aimed at improving the efficiency of the economy and increasing its international competitiveness by removing the rigidities in various segments of the Indian economy. The government initiated a variety of policies which fall under three heads viz. liberalisation, privatisation and globalisation.

### Liberalisation

As pointed out in the beginning, rules and laws which were aimed at regulating the economic activities became major hindrances in growth and development. Liberalisation was introduced to put an end to these restrictions and open up various sectors of the economy. Though a few liberalisation measures were introduced in 1980s in areas of industrial licensing, **export-import policy**, technology upgradation, **fiscal policy** and foreign investment, reform policies initiated in 1991 were more comprehensive. Let us study some important areas such as the industrial sector, financial sector, tax reforms, **foreign exchange markets** and trade and investment sectors which received greater attention in and after 1991.

**Deregulation of Industrial Sector:** In India, regulatory mechanisms were enforced in various ways (i) industrial licensing under which every entrepreneur had to get permission from government officials to start a firm, close a firm or to decide the amount of goods that could be produced (ii) private sector was not allowed in many industries (iii) some goods could be produced only in small scale industries and (iv) controls on price fixation and distribution of selected industrial products. The reform policies introduced in and after 1991 removed many of these restrictions. Industrial licensing was abolished for almost all but product categories — alcohol, cigarettes, hazardous chemicals, industrial explosives, electronics, aerospace and drugs and pharma-ceuticals. The only industries which are now reserved for the public sector are defence equipments, atomic energy generation and railway transport. Many goods produced by small scale industries have now been **dereserved**. In many industries, the market has been allowed to determine the prices.

**Financial Sector Reforms:** Financial sector includes financial institutions such as commercial banks, investment banks, **stock exchange** operations and foreign exchange market. The financial sector in India is controlled by the Reserve Bank of India (RBI). You may be aware that all the banks and other financial institutions in India are controlled through various norms and regulations of the RBI. The RBI decides the amount of money that the banks can keep with themselves, fixes interest rates, nature of lending to various sectors etc. One of the major aims of financial sector reforms is to reduce the role of RBI from regulator to facilitator of financial sector. This means that the financial sector may be allowed to take decisions on many matters without consulting the RBI. The reform policies led to the establishment of private sector banks, Indian as well as foreign. Foreign investment limit in banks was raised to around 50 per cent. Those banks which fulfil certain conditions have been given freedom to set up new branches without the approval of the RBI and rationalise their existing branch networks. Though banks have been given permission to generate resources from India and abroad, certain managerial aspects have been retained with the RBI to

safeguard the interests of the account-holders and the nation. **Foreign Institutional Investors (FII)** such as merchant bankers, mutual funds and pension funds are now allowed to invest in Indian financial markets.

**Tax Reforms:** Tax reforms are concerned with the reforms in government's taxation and public expenditure policies which are collectively known as its **fiscal policy**. There are two types of taxes: direct and indirect. **Direct taxes** consist of taxes on incomes of individuals as well as profits of business enterprises. Since 1991, there has been a continuous reduction in the taxes on individual incomes as it was felt that high rates of income tax were an important reason for tax evasion. It is now widely accepted that moderate rates of income tax encourage savings and voluntary disclosure of income. The rate of **corporation tax**, which was very high earlier, has been gradually reduced. Efforts have also been made to reform the indirect taxes, taxes levied on commodities, in order to facilitate the establishment of a common national market for goods and commodities. Another component of reforms in this area is simplification. In order to encourage better compliance on the part of taxpayers many procedures have been simplified and the rates also substantially lowered.

**Foreign Exchange Reforms:** The first important reform in the external sector was made in the foreign exchange market. In 1991, as an immediate measure to resolve the balance of payments crisis, the rupee was **devalued** against foreign currencies. This led to an increase in the inflow of foreign exchange. It also set the tone to free the determination of rupee value in the foreign exchange market from government control. Now, more often than not, markets determine exchange rates based on the demand and supply of foreign exchange.

### Trade and Investment Policy Reforms:

Liberalisation of trade and investment regime was initiated to increase international competitiveness of industrial production and also foreign investments and technology into the economy. The aim was also to promote the efficiency of the local industries and the adoption of modern technologies.

In order to protect domestic industries, India was following a regime of quantitative restrictions on imports. This was encouraged through tight control over imports and by keeping the tariffs very high. These policies reduced efficiency and competitiveness which led to slow growth of the manufacturing sector. The trade policy reforms aimed at (i) dismantling of **quantitative restrictions** on imports and exports (ii) reduction of **tariff** rates and (iii) removal of licensing procedures for imports. Import licensing was abolished except in case of hazardous and environmentally sensitive industries. Quantitative restrictions on imports of manufactured consumer goods and agricultural products were also fully removed from April 2001.

**Export duties** have been removed to increase the competitive position of Indian goods in the international markets.

### Privatisation

It implies shedding of the ownership or management of a government owned enterprise. Government companies are converted into private companies in two ways (i) by withdrawal of the government from ownership and management of public sector companies and or (ii) by outright sale of public sector companies. Privatisation of the public sector undertakings by selling off part of the equity of PSUs to the public is known as

**disinvestment.** The purpose of the sale, according to the government, was mainly to improve financial discipline and facilitate modernisation. It was also envisaged that private capital and managerial capabilities could be effectively utilised to improve the performance of the PSUs. The government envisaged that privatisation could provide strong impetus to the inflow of FDI.

The government has also made attempts to improve the efficiency of PSUs by giving them autonomy in taking managerial decisions. For instance, some PSUs have been granted special status as navaratnas and mini ratnas.

**Navaratnas and Public Enterprise Policies:** You must have read in your childhood about the famous Navaratnas or Nine Jewels in the Imperial Court of King Vikramaditya who were eminent persons of excellence in the fields of art, literature and knowledge. In 1996, in order to improve efficiency, infuse professionalism and enable them to compete more effectively in the liberalised global environment, the government chose nine PSUs and declared them as navaratnas. They were given greater managerial and operational autonomy, in taking various decisions to run the company efficiently and thus increase their profits. Greater operational, financial and managerial autonomy had also been granted to 97 other profit-making enterprises referred to as mini ratnas. The first set of navaratna companies included Indian Oil Corporation Ltd (IOC), Bharat Petroleum Corporation Ltd (BPCL), Hindustan Petroleum Corporation Ltd (HPCL), Oil and Natural Gas Corporation Ltd (ONGC), Steel Authority of India Ltd (SAIL), Indian Petrochemicals Corporation Ltd (IPCL), Bharat Heavy Electricals Ltd (BHEL), National Thermal Power Corporation (NTPC) and Videsh Sanchar Nigam Ltd (VSNL). Later, two more PSUs—Gas Authority of India Limited (GAIL) and Mahanagar Telephone Nigam Ltd (MTNL)—were also given the same status. Many of these profitable PSUs were originally formed during the 1950s and 1960s when self-reliance was an important element of public policy. They were set up with the intention of providing infrastructure and direct employment to the public so that quality end-product reaches the masses at a nominal cost and the companies themselves were made accountable to all stakeholders. The granting of navaratna status resulted in better performance of these companies. Scholars state that instead of facilitating navaratnas in their expansion and enabling them to become global players, the government partly privatised them through disinvestment. Of late, the government has decided to retain the navaratnas in the public sector and enable them to expand themselves in the global markets and raise resources by themselves from financial markets.

### Globalisation

Although globalisation is generally understood to mean integration of the economy of the country with the world economy, it is a complex phenomenon. It is an outcome of the set of various policies that are aimed at transforming the world towards greater interdependence and integration. It involves creation of networks and activities transcending economic, social and geographical boundaries. Globalisation attempts to establish links in such a way that the happenings in India can be influenced by events happening miles away. It is turning the world into one whole or creating a borderless world.

**Outsourcing:** This is one of the important outcomes of the globalisation process. In outsourcing, a company

hires regular service from external sources, mostly from other countries, which was previously provided internally or from within the country (like legal advice, computer service, advertisement, security — each provided by respective departments of the company). As a form of economic activity, outsourcing has intensified, in recent times, because of the growth of fast modes of communication, particularly the growth of Information Technology (IT). Many of the services such as voice-based business processes (popularly known as BPO or call centres), record keeping, accountancy, banking services, music recording, film editing, book transcription, clinical advice or even teaching are being outsourced by companies in developed countries to India. With the help of modern telecommunication links including the Internet, the text, voice and visual data in respect of these services is digitised and transmitted in real time over continents and national boundaries. Most multinational corporations, and even small companies, are outsourcing their services to India where they can be availed at a cheaper cost with reasonable degree of skill and accuracy. The low wage rates and availability of skilled manpower in India have made it a destination for global outsourcing in the post-reform period.

**Global Footprint!** Owing to globalisation, you might find many Indian companies expanding their wings to many other countries. In 2000, Tata Tea surprised the world by acquiring the UK based Tetley, the inventor of the tea bag, for Rs 1,870 crore. In the year 2004, Tata steel bought the Singapore-based Nat steel for Rs 1,245 crore and Tata Motors completed the buyout of Daewoo's heavy commercial vehicle unit in South Korea for Rs 448 crore. Now VSNL is acquiring Tyco's undersea cable network for Rs 572 crore, which will control over 60,000 km undersea cable network across three continents. The Tatas also plan to invest Rs 8,800 crore in fertiliser, steel and power plants in Bangladesh.

**World Trade Organisation (WTO):** The WTO was founded in 1995 as the successor organisation to the General Agreement on Trade and Tariff (GATT). GATT was established in 1948 with 23 countries as the global trade organisation to administer all **multilateral trade agreements** by providing equal opportunities to all countries in the international market for trading purposes. WTO is expected to establish a rule-based trading regime in which nations cannot place arbitrary restrictions on trade. In addition, its purpose is also to enlarge production and trade of services, to ensure optimum utilisation of world resources and to protect the environment. The WTO agreements cover trade in goods as well as services to facilitate international trade (**bilateral** and multilateral) through removal of tariff as well as **non-tariff barriers** and providing greater market access to all member countries.

As an important member of WTO, India has been in the forefront of framing fair global rules, regulations and safeguards and advocating the interests of the developing world. India has kept its commitments towards liberalisation of trade, made in the WTO, by removing quantitative restrictions on imports and reducing tariff rates.

Some scholars question the usefulness of India being a member of the WTO as a major volume of international trade occurs among the developed nations. They also say that while developed countries file complaints over agricultural subsidies given in their countries, developing countries feel cheated as they are forced to open up their markets for developed countries but are not allowed access to the markets of developed



countries. What do you think?

## Indian Economy During Reforms: an Assessment

The reform process has completed one and a half decades since its introduction. Let us now look at the performance of the Indian economy during this period. In economics, growth of an economy is measured by the Gross Domestic Product.

### *Growth of GDP and Major Sectors (in %)*

Sector	1980-81	1992-2001	2002-07 (Tenth Plan Projected)
Agriculture	3.6	3.3	4.0
Industry	7.1	6.5	9.5
Services	6.7	8.2	9.1
GDP	5.6	6.4	8.0

The opening up of the economy has led to rapid increase in foreign direct investment and foreign exchange reserves. The foreign investment, which includes foreign direct investment (FDI) and foreign institutional investment (FII), has increased from about US \$ 100 million in 1990-91 to US \$ 150 billion in 2003-04. There has been an increase in the foreign exchange reserves from about US \$ 6 billion in 1990-91 to US \$ 125 billion in 2004-05. At present, India is the sixth largest foreign exchange reserve holder in the world.

India is seen as a successful exporter of auto parts, engineering goods, IT software and textiles in the reform period. Rising prices have also been kept under control. On the other hand, the reform process has been widely criticised for not being able to address some of the basic problems facing our economy especially in the areas of employment, agriculture, industry, infrastructure development and fiscal management.

**Growth and Employment:** Though the GDP growth rate has increased in the reform period, scholars point out that the reform-led growth has not generated sufficient employment opportunities in the country. You will study the link between different aspects of employment and growth in the next unit.

**Reforms in Agriculture:** Reforms have not been able to benefit agriculture, where the growth rate has been decelerating. Public investment in agriculture sector especially in infrastructure, which includes irrigation, power, roads, market linkages and research and extension (which played a crucial role in the Green Revolution), has been reduced in the reform period. Further, the removal of fertiliser subsidy has led to increase in the cost of production, which has severely affected the small and marginal farmers. This sector has been experiencing a number of policy changes such as reduction in import duties on agricultural products, removal of minimum support price and lifting of quantitative restrictions on agricultural products; these have adversely affected Indian farmers as they now have to face increased international competition. Moreover, because of export-oriented policy strategies in agriculture, there has been a shift from production for the domestic market towards production for the export market focusing on cash crops in lieu of production of food grains. This puts pressure on prices of food grains.

**Reforms in Industry:** Industrial growth has also recorded a slowdown. This is because of decreasing demand of industrial products due to various reasons such as cheaper imports, inadequate investment in infrastructure etc. In a globalised world, developing countries are compelled to open up their economies to greater flow of goods and capital from developed countries and rendering their industries vulnerable to imported goods. Cheaper imports have, thus, replaced

the demand for domestic goods. Domestic manufacturers are facing competition from imports. The infrastructure facilities, including power supply, have remained inadequate due to lack of investment. Globalisation is, thus, often seen as creating conditions for the free movement of goods and services from foreign countries that adversely affect the local industries and employment opportunities in developing countries.

Moreover, a developing country like India still does not have the access to developed countries' markets because of high non-tariff barriers. For example, although all quota restrictions on exports of textiles and clothing have been removed in India, U.S.A. has not removed their quota restriction on import of textiles from India and China.

**Disinvestment:** Every year, the government fixes a target for disinvestment of PSUs. For instance, in 1991-92, it was targeted to mobilise Rs 2,500 crore through disinvestment. The government was able to mobilise Rs 3,040 crore more than the target. In 1998-99, the target was Rs 5,000 crore whereas the achievement was Rs 5,400 crore. Critics point out that the assets of PSUs have been undervalued and sold to the private sector. This means that there has been a substantial loss to the government. Moreover, the proceeds from disinvestment were used to offset the shortage of government revenues rather than using it for the development of PSUs and building social infrastructure in the country. Do you think selling a part of the properties of government companies is the best way to improve their efficiency?

**Reforms and Fiscal Policies:** Economic reforms have placed limits on the growth of public expenditure especially in social sectors. The tax reductions in the reform period, aimed at yielding larger revenue and to curb tax evasion, have not resulted in increase in tax revenue for the government. Also, the reform policies involving tariff reduction have curtailed the scope for raising revenue through customs duties. In order to attract foreign investment, tax incentives were provided to foreign investors which further reduced the scope for raising tax revenues. This has a negative impact on developmental and welfare expenditures.

## Conclusion

The process of globalisation through liberalisation and privatisation policies has produced positive as well as negative results both for India and other countries. Some scholars argue that globalisation should be seen as an opportunity in terms of greater access to global markets, high technology and increased possibility of large industries of developing countries to become important players in the international arena.

On the contrary, the critics argue that globalisation is a strategy of the developed countries to expand their markets in other countries. According to them, it has compromised the welfare and identity of people belonging to poor countries. It has further been pointed out that market-driven globalisation has widened the economic disparities among nations and people. Viewed from the Indian context, some studies have stated that the crisis that erupted in the early 1990s was basically an outcome of the deep-rooted inequalities in Indian society and the economic reform policies initiated as a response to the crisis by the government, with externally advised policy package, further aggravated the inequalities. Further, it has increased the income and quality of consumption of only high-income groups and the growth has been concentrated only in

some select areas in the services sector such as telecommunication, information technology, finance, entertainment, travel and hospitality services, real estate and trade, rather than vital sectors such as agriculture and industry which provide livelihoods to millions of people in the country.

Recap: The economy was facing problems of declining foreign exchange, growing imports without matching rise in exports and high inflation. India changed its economic policies in 1991 due to a financial crisis and pressure from international organisations like the World Bank and IMF. In the domestic economy, major reforms were undertaken in the industrial and financial sectors. Major external sector reforms included foreign exchange deregulations and import liberalisation. With a view to improving the performance of the public sector, there was a consensus on reducing its role and opening it up to the private sector. This was done through disinvestment and liberalisation measures. Globalisation is the outcome of the policies of liberalisation and privatisation. It means an integration of the economy of the country with the world economy. Outsourcing is an emerging business activity. The objective of the WTO is to establish a rule based trade regime to ensure optimum utilisation of world resources. During the reforms, growth of agriculture and industry has gone down but the service sector has registered growth. Reforms have not benefited the agriculture sector. There has also been a decline in public investment in this sector. Industrial sector growth has slowed down due to availability of cheaper imports and lower investment.

## Chapter 4 Poverty

### Topic-1 Poverty

- The pattern of development that the successive five year plans envisaged laid emphasis on the upliftment of the poorest of the poor (Antoyodaya) integrating the poor into the main stream and achieving a minimum standard of living for all.
- **Meaning of Poverty**—Poverty refers to a state in which an individual is unable to fulfill even the basic necessities of life.
- **Relative Poverty**—It refers to poverty of people in comparison to other people, regions or nations.
- **Absolute Poverty**—It means the inability to arrange for the basic human needs. Such as food, clothing, health facilities, housing, etc.
- **Causes of Poverty India (1) Economic Causes**—(i) Excessive dependence on agriculture, (ii) Lack of industrialisation, (iii) Lack of capital formation, (iv) Lack of efficient entrepreneurship, (v) Rapid increase in population, (vi) Un-equal distribution of National Income, (vii) Low productivity, (viii) Unemployment and semi-employment, (ix) Inflationary pressure, (x) Vicious circle of poverty. **(2) Social Causes**—(i) Traditional Conventions, (ii) Belief in destiny, (iii) Policy of Non-violence (iv) Prevalent child marriage, (v) Illiteracy and Ignorance, (vi) Caste system. **(3) Political and Administrative Causes**—(i) Political instability, (ii) Failure of Government Policies
- **Special Programmes of Poverty Alleviation**—
- **Self Employment or Wage Employment Programme:** (1) Rural Employment Generation Programme, (2) Prime Minister's Rozgar Yojana (3) Swarna Jayanti Shahri Rozgar Yojana (4) Sampurna

Grammen Rozgar Yojana

- **Programmes to improve the food and nutritional status of the poor:** (1) Public Distribution System (2) Integrated Child Development Scheme (3) Mid day Meal Scheme
- **Programmes to develop Infrastructure** (1) Pradhan Mantri Gram Sadak Yojana (2) Pradhan Mantri Gramodaya Yojana (3) Valmiki Ambedkar Awas Yojana
- **National Social Assistance Programmes:** (1) Indira Gandhi National Old Age Pension Scheme (2) Indira Gandhi National Widow Pension Scheme (3) Indira Gandhi National Disability Pension Scheme (4) National Family Benefit Scheme (5) Annapurna Scheme
- **Other Programmes:** (1) Food for Work Programme (2) National Maternity Benefit Yojana
- **Flaws in Anti-Poverty Programmes**—(i) Inadequate Financial Limits, (ii) Lack of Interest, (iii) Poor targeting, (iv) Lack of Accountability, (v) Chain of mediators.

Some of the most challenging issues facing India today are poverty, development of rural India and building infrastructure. We are a billion-strong country today and our human capital is the biggest asset; it needs investment in health and education. We also need to understand the concept of employment and the need for creating more employment in our country. We will also look at the implications of development on our environment and call for sustainable development. There is a need to critically assess government initiatives in tackling all these issues each of which has been taken up separately in this unit.

### Who are the Poor?

Push cart vendors, street cobblers, women who string flowers, rag pickers, vendors and beggars are some examples of poor and vulnerable groups in urban areas. The poor people possess few assets and reside in kutchra hutments with walls made of baked mud and roofs made of grass, thatch, bamboo and wood. The poorest of them do not even have such dwellings. In rural areas many of them are landless. Even if some of them possess land, it is only dry or waste land. Many do not get to have even two meals a day. Starvation and hunger are the key features of the poorest households. The poor lack basic literacy and skills and hence have very limited economic opportunities. Poor people also face unstable employment.

Malnutrition is alarmingly high among the poor. Ill health, disability or serious illness makes them physically weak. They borrow from money lenders who charge high rates of interest that lead them into chronic indebtedness. The poor are highly vulnerable. They are not able to negotiate their legal wages from employers and are exploited. Most poor households have no access to electricity. Their primary cooking fuel is firewood and cow dung cake. A large section of poor people do not even have access to safe drinking water. There is evidence of extreme gender inequality in the participation of gainful employment, education and in decision-making within the family. Poor women receive less care on their way to motherhood. Their children are less likely to survive or be born healthy. Scholars identify the poor on the basis of their occupation and ownership of assets. They state that the rural poor work mainly as landless agricultural labourers, cultivators with very small landholdings, landless labourers who are engaged in a variety of non-agricultural jobs and tenant cultivators with small land holdings. The urban poor are largely the overflow of the rural poor who had migrated to urban areas in search of

alternative employment and livelihood, labourers who do a variety of casual jobs and the self-employed who sell a variety of things on roadsides and are engaged in various activities.

**What is Poverty?** Two scholars, Shaheen Rafi Khan and Damian Killen, put the conditions of the poor in a nutshell: Poverty is hunger. Poverty is being sick and not being able to see a doctor. Poverty is not being able to go to school and not knowing how to read. Poverty is not having a job. Poverty is fear for the future, having food once in a day. Poverty is losing a child to illness, brought about by unclear water. Poverty is powerlessness, lack of representation and freedom. What do you think?

### How are Poor People Identified?

If India is to solve the problem of poverty, it has to find viable and sustainable strategies to address the causes of poverty and design schemes to help the poor out of their situation. However, for these schemes to be implemented, the government needs to be able to identify who the poor are. For this there is need to develop a scale to measure poverty, and the factors that make up the criteria for this measurement or mechanism need to be carefully chosen.

In pre-independent India, Dadabhai Naoroji was the first to discuss the concept of a Poverty Line. He used the menu for a prisoner and used appropriate prevailing prices to arrive at what may be called 'jail cost of living'. However, only adults stay in jail whereas, in an actual society, there are children too. He, therefore, appropriately adjusted this cost of living to arrive at the poverty line. For this adjustment, he assumed that one-third population consisted of children and half of them consumed very little while the other half consumed half of the adult diet. This is how he arrived at the factor of three-fourths;  $(1/6)(\text{Nil}) + (1/6)(\text{Half}) + (2/3)(\text{Full}) = (3/4)(\text{Full})$ . The weighted average of consumption of the three segments gives the average poverty line, which comes out to be three-fourth of the adult jail cost of living.

In post-independent India, there have been several attempts to work out a mechanism to identify the number of poor in the country. For instance, in 1962, the Planning Commission formed a Study Group. In 1979, another body called the 'Task Force on Projections of Minimum Needs and Effective Consumption Demand' was formed. In 1989, an 'Expert Group' was constituted for the same purpose. Besides these bodies, many individual economists have also attempted to develop such a mechanism.

For the purpose of defining poverty we divide people into two categories; the poor and the non-poor and the poverty line separates the two. However, there are many kinds of poor; the absolutely poor, the very poor and the poor. Similarly there are various kinds of non-poor; the middle class, the upper middle class, the rich, the very rich and the absolutely rich. Think of this as a line or continuum from the very poor to the absolutely rich with the poverty line dividing the poor from the non-poor.



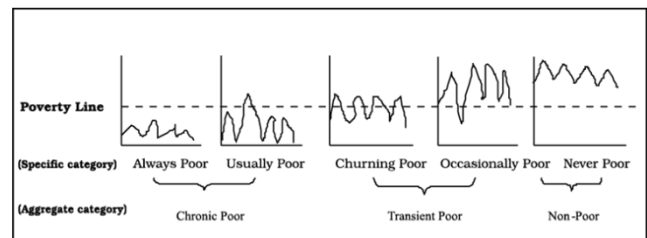
**Chart 4.1: Poverty Line**

**Categorising Poverty:** There are many ways to categorise poverty. In one such way people who are **always poor** and those who are **usually poor** but who

may sometimes have a little more money (example: casual workers) are grouped together as the **chronic poor**. Another group are the **churning poor** who regularly move in and out of poverty (example: small farmers and seasonal workers) and the **occasionally poor** who are rich most of the time but may sometimes have a patch of bad luck. They are called the **transient poor**. And then there are those who are **never poor** and they are the **non-poor**.

**The Poverty Line:** Now let us examine how to determine the poverty line. There are many ways of measuring poverty. One way is to determine it by the monetary value (per capita expenditure) of the minimum calorie intake that was estimated at 2,400 calories for a rural person and 2,100 for a person in the urban area. Based on this, in 1999-2000, the poverty line was defined for rural areas as consumption worth Rs 328 per person a month and for urban areas it was Rs 454.

Though the government uses Monthly Per Capita Expenditure (MPCE) as proxy for income of households to identify the poor, do you think this mechanism satisfactorily identifies the poor households in our country?



### The Chronic Poor, Transient Poor and Non-Poor

Scholars state that a major problem with this mechanism is that it groups all the poor together and does not differentiate between the very poor and the other poor (See chart 4.2). Also this mechanism takes into account expenditure on food and a few select items as proxy for income, economists question its basis. This mechanism is helpful in identifying the poor as a group to be taken care of by the government, but it would be difficult to identify who among the poor need help the most. There are many factors, other than income and assets, which are associated with poverty; for instance, the accessibility to basic education, health care, drinking water and sanitation. They need to be considered to develop Poverty Line. The existing mechanism for determining the Poverty Line also does not take into consideration social factors that trigger and perpetuate poverty such as illiteracy, ill health, lack of access to resources, discrimination or lack of civil and political freedoms. The aim of poverty alleviation schemes should be to improve human lives by expanding the range of things that a person could be and could do, such as to be healthy and well-nourished, to be knowledgeable and participate in the life of a community. From this point of view, **development is about removing the obstacles to the things that a person can do in life, such as illiteracy, ill health, lack of access to resources, or lack of civil and political freedoms.**

Though the government claims that higher rate of growth, increase in agricultural production, providing employment in rural areas and economic reform packages introduced in the 1990s have resulted in a decline in poverty levels, economists raise doubts about the government's claim. They point out that the way the data are collected, items that are included in the



consumption basket, methodology followed to estimate the poverty line and the number of poor are manipulated to arrive at the reduced figures of the number of poor in India.

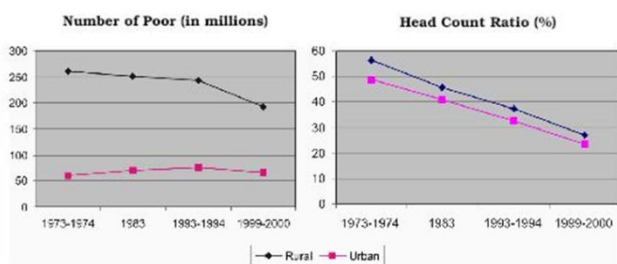
Due to various limitations in the official estimation of poverty, scholars have attempted to find alternative methods. For instance, Amartya Sen, noted Nobel Laureate, has developed an index known as Sen Index. There are other tools such as Poverty Gap Index and Squared Poverty Gap. You will learn about these tools in higher classes.

### The Number of Poor in India

When the number of poor is estimated as the proportion of people below the poverty line, it is known as 'Head Count Ratio'. You might be interested in knowing the total number of poor persons residing in India. Where do they reside and has their number or proportion declined over the years or not? When such a comparative analysis of poor people is made in terms of ratios and percentages, we will have an idea of different levels of poverty of people and their distribution; between states and over time.

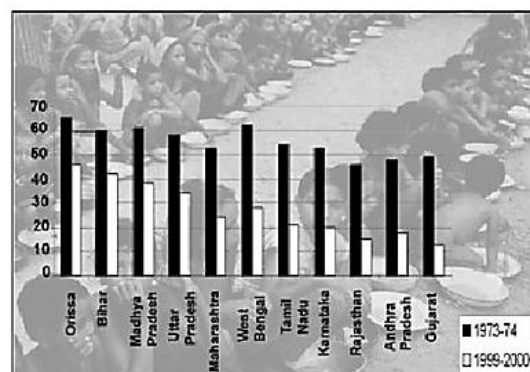
The official data on poverty is made available to the public by the Planning Commission. It is estimated on the basis of consumption expenditure data collected by the National Sample Survey Organisation (NSSO). Chart 4.3 shows the number of poor and their proportion to the population in India for the years 1973-2000. In 1973-74, more than 321 million people were below the poverty line. In 1999-2000, this number has come down to about 260 million. In terms of proportion, in 1973-74, about 55 per cent of the total population was below the poverty line. In 1999-2000, it has fallen to 26 per cent. In 1973-74, more than 80 per cent of the poor resided in rural areas and in 1999-2000, this has come down to about 75 per cent. This means that more than three-fourth of the poor in India reside in villages. Why do you think this is the case? Also poverty, which was prevailing predominantly in rural areas, has shifted to urban areas. How could we say this?

Chart 4.3: Trends in Poverty in India, 1973-2000



In the 1990s, the absolute number of poor in rural areas had declined whereas the number of their urban counterparts increased marginally. The poverty ratio declined continuously for both urban and rural areas. From Chart you will notice that during 1973-2000, there has been a decline in the number of poor and their proportion but the nature of decline in the two parameters is not encouraging. The ratio is declining much slower than the absolute number of poor in the country. You will also notice that the gap between the absolute number of poor in rural and urban areas did not narrow down until the early 1990s whereas in the case of ratio the gap has remained the same until 1999-2000. The state level trends in poverty are shown in Chart 4.4.

Chart 4.4: Population Below Poverty Line in Some Large States, 1973-2000 (%)



Note: Uttar Pradesh includes the present Uttarakhand; Madhya Pradesh includes Chhattisgarh and Bihar includes Jharkhand

It reveals that five states — Uttar Pradesh, Bihar, Madhya Pradesh, West Bengal and Orissa — account for about 70 per cent of India's poor. You will also notice that during 1973-74, about half the population in most of these large states was living below the poverty line. In 1999-2000, only two states — Bihar and Orissa — were left near that same level. Though they also reduced their share of poor, compared to other states, their success is marginal. If we look at Gujarat, it reduced its people below the poverty line from 48 per cent to 15 per cent during 1973-2000. During this period, West Bengal has been just as successful; from nearly two-third, i.e. 63 per cent of the population below the poverty line the same was reduced to about 27 per cent.

### What Causes Poverty?

The causes of poverty lie in the institutional and social factors that mark the life of the poor. The poor are deprived of quality education and unable to acquire skills which fetch better incomes. Also access to health care is denied to the poor. The main victims of caste, religious and other discriminatory practices are poor. These can be caused as a result of (i) social, economic and political inequality (ii) social exclusion (iii) unemployment (iv) indebtedness (v) unequal distribution of wealth. Aggregate poverty is just the sum of individual poverty. Poverty is also explained by general, economy-wide problems, such as (i) low capital formation (ii) lack of infrastructure (iii) lack of demand (iv) pressure of population (v) lack of social/welfare nets. As over 70 per cent of Indians were engaged in agriculture throughout the British Raj period, the impact on that sector was more important on living standards than anything else. British policies involved sharply raising rural taxes that enabled merchants and moneylenders to become large landowners. Under the British, India began to export food grains and, as a result, as many as 26 million people died in famines between 1875 and 1900.

Britain's main goals from the Raj were to provide a market for British exports, to have India service its debt payments to Britain, and for India to provide manpower for the British imperial armies.

The British Raj impoverished millions of people in India. Our natural resources were plundered, our industries worked to produce goods at low prices for the British and our food grains were exported. Many died due to famine and hunger. In 1857-58, anger at the overthrow of many local leaders, extremely high taxes imposed on peasants, and other resentments boiled over in a revolt against British rule by the sepoys, Indian troops commanded by the British.

Even today agriculture is the principal means of livelihood and land is the primary asset of rural people;

ownership of land is an important determinant of material well-being and those who own some land have a better chance to improve their living conditions. Since independence, the government has attempted to redistribute land and has taken land from those who have large amounts to distribute it to those who do not have any land, but work on the land as wage labourers. However, this move was successful only to a limited extent as large sections of agricultural workers were not able to farm the small holdings that they now possessed as they did not have either money (assets) or skills to make the land productive and the land holdings were too small to be viable. Also most of the Indian states failed to implement land redistribution policies. A large section of the rural poor in India are the small farmers. The land that they have is, in general, less fertile and dependent on rains. Their survival depends on subsistence crops and sometimes on livestock. With the rapid growth of population and without alternative sources of employment, the per-head availability of land for cultivation has steadily declined leading to fragmentation of land holdings. The income from these small land holdings is not sufficient to meet the family's basic requirements.

You must have heard about farmers committing suicide due to their inability to pay back the loans that they have taken for cultivation and other domestic needs as their crops have failed due to drought or other natural calamities (see Box 4.3).

Most members of scheduled castes and scheduled tribes are not able to participate in the emerging employment opportunities in different sectors of the urban and rural economy as they do not have the necessary knowledge and skills to do so.

A large section of urban poor in India are largely the overflow of the rural poor who migrate to urban areas in search of employment and a livelihood. Industrialisation has not been able to absorb all these people. The urban poor are either unemployed or intermittently employed as casual labourers. Casual labourers are among the most vulnerable in society as they have no job security, no assets, limited skills, sparse opportunities and no surplus to sustain them.

Poverty is, therefore, also closely related to nature of employment. Unemployment or under employment and the casual and intermittent nature of work in both rural and urban areas that compels indebtedness, in turn, reinforces poverty. Indebtedness is one of the significant factors of poverty.

A steep rise in the price of food grains and other essential goods, at a rate higher than the price of luxury goods, further intensifies the hardship and deprivation of lower income groups. The unequal distribution of income and assets has also led to the persistence of poverty in India.

All this has created two distinct groups in society: those who possess the means of production and earn good incomes and those who have only their labour to trade for survival. Over the years, the gap between the rich and the poor in India has widened. Poverty is a multi-dimensional challenge for India that needs to be addressed on a war footing.

### **Policies and Programmes Towards Poverty Alleviation**

The Indian Constitution and five year plans state social justice as the primary objective of the developmental strategies of the government.

The government's approach to poverty reduction was of

three dimensions. The first one is growth-oriented approach. It is based on the expectation that the effects of economic growth — rapid increase in gross domestic product and per capita income — would spread to all sections of society and will trickle down to the poor sections also. This was the major focus of planning in the 1950s and early 1960s.

It was felt that rapid industrial development and transformation of agriculture through green revolution in select regions would benefit the underdeveloped regions and the more backward sections of the community. You must have read in Chapters 2 and 3 that the overall growth and growth of agriculture and industry have not been impressive. Population growth has resulted in a very low growth in per capita incomes. The gap between poor and rich has actually widened. The Green Revolution exacerbated the disparities regionally and between large and small farmers. There was unwillingness and inability to redistribute land. Economists state that the benefits of economic growth have not trickled down to the poor.

While looking for alternatives to specifically address the poor, policy makers started thinking that incomes and employment for the poor could be raised through the creation of additional assets and by means of work generation. This could be achieved through specific poverty alleviation programmes. This second approach has been initiated from the Third Five Year Plan (1961-66) and progressively enlarged since then. One of the noted programmes initiated in the 1970s was Food for Work.

The programmes that are being implemented now are based on the perspective of the Tenth Five Year Plan (2002-2007) Expanding self-employment programmes and wage employment programmes are being considered as the major ways of addressing poverty. Examples of self-employment programmes are Rural Employment Generation Programme (REGP), Prime Minister's Rozgar Yojana (PMRY) and Swarna Jayanti Shahari Rozgar Yojana (SJSRY). The first programme aims at creating self-employment opportunities in rural areas and small towns. The Khadi and Village Industries Commission is implementing it. Under this programme, one can get financial assistance in the form of bank loans to set up small industries. The educated unemployed from low-income families in rural and urban areas can get financial help to set up any kind of enterprise that generates employment under PMRY. SJSRY mainly aims at creating employment opportunities—both self-employment and wage employment—in urban areas. Earlier, under self-employment programmes, financial assistance was given to families or individuals. Since the 1990s, this approach has been changed. Now those who wish to benefit from these programmes are encouraged to form self-help groups. Initially they are encouraged to save some money and lend among themselves as small loans. Later, through banks, the government provides partial financial assistance to SHGs which then decide whom the loan is to be given to for self-employment activities. Swarnajayanti Gram Swarozgar Yojana (SGSY) is one such programme.

The government has a variety of programmes to generate wage employment for the poor unskilled people living in rural areas. Some of them are National Food for Work Programme (NFWP) and Sampoorna Grameen Rozgar Yojana (SGRY). In August 2005, the Parliament has passed a new Act to provide guaranteed wage employment to every household whose adult volunteer is to do unskilled manual work for a minimum

of 100 days in a year. This Act is known as National Rural Employment Guarantee Act–2005. Under this Act all those among the poor who are ready to work at the minimum wage can report for work in areas where this programme is implemented.

The third approach to addressing poverty is to provide minimum basic amenities to the people. India was among the pioneers in the world to envisage that through public expenditure on social consumption needs — provision of food grains at subsidised rates, education, health, water supply and sanitation — people's living standard could be improved. Programmes under this approach are expected to supplement the consumption of the poor, create employment opportunities and bring about improvements in health and education. One can trace this approach from the Fifth Five Year Plan, "even with expanded employment opportunities, the poor will not be able to buy for themselves all the essential goods and services. They have to be supplemented up to at least certain minimum standards by social consumption and investment in the form of essential food grains, education, health, nutrition, drinking water, housing, communications and electricity." Three major programmes that aim at improving the food and nutritional status of the poor are Public Distribution System, Integrated Child Development Scheme and Midday Meal Scheme. Pradhan Mantri Gram Sadak Yojana, Pradhan Mantri Gramodaya Yojana, Valmiki Ambedkar Awas Yojana are also attempts in the same direction. It may be essential to briefly state that India has achieved satisfactory progress in many aspects. The government also has a variety of other social security programmes to help a few specific groups. National Social Assistance Programme is one such programme initiated by the central government. Under this programme, elderly people who do not have anyone to take care of them are given pension to sustain themselves. Poor women who are destitute and widows are also covered under this scheme.

### Poverty Alleviation Programmes — A Critical Assessment

Efforts at poverty alleviation have borne fruit in that for the first time since independence, the percentage of absolute poor in some states is now well below the national average. Despite various strategies to alleviate poverty, hunger, malnourishment, illiteracy and lack of basic amenities continue to be a common feature in many parts of India. Though the policy towards poverty alleviation has evolved in a progressive manner, over the last five and a half decades, it has not undergone any radical transformation.

You can find change in nomenclature, integration or mutations of programmes. However, none resulted in any radical change in the ownership of assets, process of production and improvement of basic amenities to the needy. Scholars, while assessing these programmes, state three major areas of concern which prevent their successful implementation. Due to unequal distribution of land and other assets, the benefits from direct poverty alleviation programmes have been appropriated by the non-poor. Compared to the magnitude of poverty, the amount of resources allocated for these programmes is not sufficient. Moreover, these programmes depend mainly on government and bank officials for their implementation. Since such officials are ill motivated, inadequately trained, corruption prone and vulnerable to pressure from a variety of local elites, the resources

are inefficiently used and wasted.

There is also non-participation of local level institutions in programme implementation. Government policies have also failed to address the vast majority of vulnerable people who are living on or just above the poverty line. It also reveals that high growth alone is not sufficient to reduce poverty. Without the active participation of the poor, successful implementation of any programme is not possible.

Poverty can effectively be eradicated only when the poor start contributing to growth by their active involvement in the growth process. This is possible through a process of social mobilisation, encouraging poor people to participate and get them empowered. This will also help create employment opportunities which may lead to increase in levels of income, skill development, health and literacy. Moreover, it is necessary to identify poverty stricken areas and provide infrastructure such as schools, roads, power, telecom, IT services, training institutions etc.

### Conclusion

We have travelled about six decades since independence. The objective of all our policies had been stated as promoting rapid and balanced economic development with equality and social justice. Poverty alleviation has always been accepted as one of India's main challenges by the policy makers, regardless of which government was in power. The absolute number of poor in the country has gone down and some states have less proportion of poor than even the national average. Yet, critics point out that even though vast resources have been allocated and spent, we are still far from reaching the goal. There is improvement in terms of per capita income and average standard of living; some progress towards meeting the basic needs has been made. But when compared to the progress made by many other countries, our performance has not been impressive. Moreover, the fruits of development have not reached all sections of the population. Some sections of people, some sectors of the economy, some regions of the country can compete even with developed countries in terms of social and economic development, yet, there are many others who have not been able to come out of the vicious circle of poverty.

### Recap

Reducing poverty has been one of the major objectives of India's developmental strategies. The per capita consumption expenditure level which meets the average per capita daily requirement of 2,400 calories in rural areas and 2,100 calories in urban areas, along with a minimum of non-food expenditure, is called poverty line or absolute poverty. When the number of poor and their proportion is compared, we will have an idea of different levels of poverty of people and their distribution between states and over time. The number of poor in India and their proportion to total population has declined substantially. For the first time in the 1990s, the absolute number of poor has declined. Majority of poor are residing in rural areas and engage themselves in casual and unskilled jobs. Income and expenditure oriented approaches do not take into account many other attributes of the poor people. Over the years, the government has been following three approaches to reduce poverty in India: growth oriented development, specific poverty alleviation programmes and meeting the minimum needs of the poor. Government initiatives are yet to transform the ownership of assets, processes of production and meet the basic amenities of the poor.



## Chapter 5

### Human Capital Formation In India

#### Topic-3 Human Capital Formation

Just as a country can turn physical resources like land into physical capital like factories, similarly, it can also turn human resources like students into human capital like engineers and doctors. Societies need sufficient human capital in the first place—in the form of competent people who have themselves been educated and trained as professors and other professionals. In other words, we need good human capital to produce other human capital (say, doctors, engineers...). This means that we need investment in human capital to produce more human capital out of human resources.

• **Human Capital Formation**—It refers to the process of acquiring and increasing the number of persons who have the skill, education and experience which are critical for the economic and political development of a country.

• **Difference between Human Capital and Physical Capital Formation**—In Physical Capital, the entrepreneur possesses knowledge to calculate the expected rate of return on a range of investment and then rationally decides which investment should be made. In human capital, an individual is influenced by the peers, educators and society regarding human capital investment.

• **Importance of Human Capital Formation in Economic Development**—(i) Optimum utilisation of resources, (ii) Helpful in production of National Wealth, (iii) Co-ordination, (iv) Speed up the rate of economic growth, (v) Changes in the outlook of the labour force.

• **Sources of Human Capital**—(i) Investment on health and nutrition, (ii) Investment on education and training, (iii) Housing development, (iv) Migration and (v) Expenditure on information.

Investment in education is considered as one of the main sources of human capital. There are several other sources as well. Investments in health, on-the-job training, migration and information are the other sources of human capital formation.

Like education, health is also considered as an important input for the development of a nation as much as it is important for the development of an individual.

Preventive medicine (vaccination), curative medicine (medical intervention during illness), social medicine (spread of health literacy) and provision of clean drinking water and good sanitation are the various forms of health expenditures. Health expenditure directly increases the supply of healthy labour force and is, thus, a source of human capital formation.

Firms spend on giving on-the-job-training to their workers. Expenditure regarding on-the-job training is a source of human capital formation as the return of such expenditure in the form of enhanced labour productivity is more than the cost of it.

Technically qualified persons, like engineers and doctors, migrate to other countries because of higher salaries that they may get in such countries. The enhanced earnings in the new place outweigh the costs of migration; hence, expenditure on migration is also a source of human capital formation.

People spend to acquire information relating to the labour market and other markets like education and health. This information is necessary to make decisions regarding investments in human capital as well as for

efficient utilisation of the acquired human capital stock. Expenditure incurred for acquiring information relating to the labour market and other markets is also a source of human capital formation.

• **Human Capital and Economic Growth**: Economic growth means the increase in real national income of a country. Higher rate of economic growth is possible only through human capital. In fact there are two main sources of human capital: (i) Education, (ii) Health. These two sources play an important role in the economic growth.

*It is difficult to establish a relation of cause and effect from the growth of human capital (education and health) to economic growth but we can see that these sectors have grown simultaneously. Growth in each sector probably has reinforced the growth of every other sector.*

*Select Indicators of Development in Education and Health Sectors*

Particulars	1951	1981	1991	2001
Real Per Capita Income (in Rs)	3,687	5,353	7,321	10,306
Crude Death Rate (Per 1,000 Population)	25.1	12.5	9.8	8.1
Infant Mortality Rate	148	110	80	63
Life Expectancy at Birth (in Years)				
Male	37.2	54.1	59.7	63.9
Female	36.2	54.7	60.9	66.9
Literacy Rate (%)	16.67	43.57	52.21	65.20

*World Bank, in its recent report, 'India and the Knowledge Economy —Leveraging Strengths and Opportunities', states that India should make a transition to the knowledge economy and if it uses its knowledge as much as Ireland does (it is judged that Ireland uses its knowledge economy very effectively), then the per capita income of India will increase from a little over US \$1000 in 2002 to US \$ 3000 in 2020. It further states that the Indian economy has all the key ingredients for making this transition, such as, a critical mass of skilled workers, a well-functioning democracy and a diversified science and technology infrastructure. Thus the two reports point out the fact that further human capital formation in India will move its economy to a higher growth trajectory.*

#### India as a Knowledge Economy

The Indian software industry has been showing an impressive record over the past decade. Entrepreneurs, bureaucrats and politicians are now advancing views about how India can transform itself into a knowledge-based economy by using information technology (IT). There have been some instances of villagers using e-mail which are cited as examples of such transformation. Likewise, e-governance is being projected as the way of the future. The value of IT depends greatly on the existing level of economic development.

• **Human Development Index (HDI)**—Human development index is broadly an arrangement of social aggregates average of longevity, knowledge and access to resources. India's position is 130th out of 189 countries of the world. It is from the HDI prepared by UNDP in 2018. The value of HDI is 0.638.

• **Problems of Human Capital Formation**—(i) Problem of estimation of total stock of human capital, (ii) Problem of estimation of growth rate of human capital formation, (iii) Neglect of on the job training programme, (iv) Lack of initiative, (v) Regional disparities, (vi) Lack of foreign exchange funds, (viii) Brain drain.

• **Education**—An Essential Element of Human Resource Development **What is Education:** It refers to the process of teaching, training and learning especially in schools or colleges, to improve knowledge and develop skill.

• **Development of Education in India— (1)**

**Elementary Education**—Efforts made by Government. (i) Sarva Shiksha Abhiyan (SSA), (ii) Mid-day Meals Plan, (iii) Kasturba Gandhi Balika Vidyalaya Scheme. **(2) Secondary Education**— (i) Novodaya Vidyalaya, (ii) Kendriya Vidyalaya, (iii) National Council of Educational Research and Training, (iv) Vocationalisation of Secondary Education. **(3) University and Higher Education**—(i) IGNOU, (ii) Academic Staff College. **(4) Technical, Medical and Agriculture Education.** **(5) Rural Education** **(6) Adult and Continuing Education.**

• **Defects of Education System**—(i) Wide Spread Illiteracy, (ii) Low rural access level, (iii) Low enrolment ratio, (iv) Dropouts, (v) Privatisation, (vi) Unbalanced Development, (vii) Disparities in Educational Development, (viii) Defective Examination System.

• **Measures to Reform Educational System**—(i) Extension of Primary Education, (ii) Control over higher education, (iii) Encouragement to female education, (iv) Encouragements to education system, (v) Employment oriented education, (vi) Increase in government expenditure on education, (vii) Control over political interference.

## Conclusion

*The economic and social benefits of human capital formation and human development are well known. The union and state governments in India have been earmarking substantial financial outlays for development of education and health sectors. The spread of education and health services across different sectors of society should be ensured so as to simultaneously attain economic growth and equity. India has a rich stock of scientific and technical manpower in the world. The need of the hour is to better it qualitatively and provide such conditions so that they are utilised in our own country.*

*Recap: Investments in education convert human beings into human capital; human capital represents enhanced labour productivity, which is an acquired ability and an outcome of deliberate investment decisions with an expectation that it will increase future income sources. Investments in education, on-the-job training, health, migration and information are the sources of human capital formation. The concept of physical capital is the base for conceptualising human capital. There are some similarities as well as dissimilarities between the two forms of capital formation. Investment in human capital formation is considered as efficient and growth enhancing. Human development is based on the idea that education and health are integral to human well-being because only when people have the ability to read and write and the ability to lead a long and healthy life, will they be able to make other choices which they value. The percentage of expenditure on education of the total government expenditure indicates the importance of education in the scheme of things for the government.*

## Chapter 6 Rural Development

### Topic-2 Rural Development

India is primarily a country of villages. Our most of the

poor people live in villages. In our almost all the five year plans focal point has been rural development. Even though, we could not develop our villages. If we are really interested in rural development, we will have to develop villages.

• **Rural Development**—“To improve the living standards to low level of income people living in rural areas and to make this development effort permanent.” In this way concept of rural development is more wider than agriculture development.

• **Key Issues in Rural Development**—(i) Development of human resources, (ii) Land reforms, (iii) Development of basic infrastructure, (iv) Poverty Alleviation, (v) Development of productive resources.

**Rural Credit**—That need of agriculture credit which are required for the completion of agriculture works is known as agricultural credit/finance.

**Classification of Agricultural Credit— Short-Term**

**Credit**—It is required for a period of 6 to 12 months for buying seeds, tools, manure, fertilizers, etc. **Medium-**

**Term Credit**—It is required for about one to five years for digging wells, buying machinery, etc. **Long-Term**

**Credit**—It is required for the period of 5 to 20 years for the purchase of tractors, land, costly equipment, tube wells, etc.

Credit: Growth of rural economy depends primarily on infusion of capital, from time to time, to realise higher productivity in agriculture and non-agriculture sectors. As the time gestation between crop sowing and realisation of income after production is quite long, farmers borrow from various sources to meet their initial investment on seeds, fertilisers, implements and other family expenses of marriage, death, religious ceremonies etc.

At the time of independence, moneylenders and traders exploited small and marginal farmers and landless labourers by lending to them on high interest rates and by manipulating the accounts to keep them in a debt-trap. A major change occurred after 1969 when India adopted social banking and multi-agency approach to adequately meet the needs of rural credit. Later, the National Bank for Agriculture and Rural Development (NABARD) was set up in 1982 as an apex body to coordinate the activities of all institutions involved in the rural financing system. The Green Revolution was a harbinger of major changes in the credit system as it led to the diversification of the portfolio of rural credit towards production-oriented lending.

The institutional structure of rural banking today consists of a set of multi-agency institutions, namely, commercial banks, regional rural banks (RRBs), cooperatives and land development banks. They are expected to dispense adequate credit at cheaper rates. Recently, Self-Help Groups (henceforth SHGs) have emerged to fill the gap in the formal credit system because the formal credit delivery mechanism has not only proven inadequate but has also not been fully integrated into the overall rural social and community development. Since some kind of collateral is required, vast proportion of poor rural households were automatically out of the credit network. The SHGs promote thrift in small proportions by a minimum contribution from each member. From the pooled money, credit is given to the needy members to be repayable in small instalments at reasonable interest rates. By March end 2003, more than seven lakh SHGs had reportedly been credit linked. Such credit provisions are generally referred to as micro-credit programmes. SHGs have helped in the empowerment of

women. It is alleged that the borrowings are mainly confined to consumption purposes. Why are borrowers not spending for productive purposes?

**Rural Banking — a Critical Appraisal:** Rapid expansion of the banking system had a positive effect on rural farm and non-farm output, income and employment, especially after the green revolution — it helped farmers to avail services and credit facilities and a variety of loans for meeting their production needs. Famines became events of the past; we have now achieved food security which is reflected in the abundant buffer stocks of grains. However, all is not well with our banking system.

With the possible exception of the commercial banks, other formal institutions have failed to develop a culture of deposit mobilisation — lending to worthwhile borrowers and effective loan recovery. Agriculture loan default rates have been chronically high. Why farmers failed to pay back loans? It is alleged that farmers are deliberately refusing to pay back loans. What could be the reasons?

Thus, the expansion and promotion of the rural banking sector has taken a backseat after reforms. To improve the situation, it is suggested that banks need to change their approach from just being lenders to building up relationship banking with the borrowers. Inculcating the habit of thrift and efficient utilisation of financial resources needs to be enhanced among the farmers too.

• **Agricultural Marketing** — “Agriculture Marketing includes all those activities which are related with the agricultural produce to deliver from farmers to ultimate consumers.”

Agricultural marketing is a process that involves the assembling, storage, processing, transportation, packaging, grading and distribution of different agricultural commodities across the country.

Let us discuss four such measures that were initiated to improve the marketing aspect. The first step was regulation of markets to create orderly and transparent marketing conditions. By and large, this policy benefited farmers as well as consumers. Second component is provision of physical infrastructure facilities like roads, railways, warehouses, godowns, cold storages and processing units. The current infrastructure facilities are quite inadequate to meet the growing demand and need to be improved. Cooperative marketing, in realising fair prices for farmers’ products, is the third aspect of government initiative. The success of milk cooperatives in transforming the social and economic landscape of Gujarat and some other parts of the country is testimony to the role of cooperatives. However cooperatives have received a setback during the recent past due to inadequate coverage of farmer members, lack of appropriate link between marketing and processing cooperatives and inefficient financial management. The fourth element is the policy instruments like (i) assurance of minimum support prices (MSP) for agricultural products (ii) maintenance of buffer stocks of wheat and rice by Food Corporation of India and (iii) distribution of food grains and sugar through PDS. These instruments are aimed at protecting the income of the farmers and providing foodgrains at a subsidised rate to the poor. However, despite government intervention, private trade (by moneylenders, rural political elites, big merchants and rich farmers) predominates agricultural markets. The need for government intervention is imminent particularly when a large share of agricultural products, is handled by the private sector.

Agricultural marketing has come a long way with the intervention of the government in various forms. Some scholars argue that commercialisation of agriculture offers tremendous scope for farmers to earn higher incomes provided the government intervention is restricted. What do you think about this view?

**Emerging Alternate Marketing Channels:** It has been realised that if farmers directly sell their produce to consumers, it increases their incomes. Some examples of these channels are Apni Mandi (Punjab, Haryana and Rajasthan); Hadaspar Mandi (Pune); Rythu Bazars (vegetable and fruit markets in Andhra Pradesh) and Uzhavar Sandies (farmers markets in Tamil Nadu). Further, several national and multinational fast food chains are increasingly entering into contracts/alliances with farmers to encourage them to cultivate farm products (vegetables, fruits, etc.) of the desired quality by providing them with not only seeds and other inputs but also assured procurement of the produce at pre-decided prices. It is argued that such arrangements will help in reducing the price risks of farmers and would also expand the markets for farm products. Do you think such arrangements raise incomes of small farmers.

• **Diversification of Agricultural Activities** —

Diversification of agricultural activities mean basically to grow multiple crops and extension of activities subsidiary to agriculture. It has two aspects: (i) Change in cropping pattern (ii) Diversification of agricultural activities

**Need of Diversification** — (i) To reduce the risk of agriculture, (ii) To meet challenges of poverty and other odd situations, (iii) To reduce the burden of population on agriculture.

**Diversification of Agriculture Activities in India** —

(i) Animal husbandry, (ii) Fisheries, (iii) Pottery, (iv) Horticulture, (v) Use of I.T.

## Sustainable Development and Organic Farming

In recent years, awareness of the harmful effect of chemical-based fertilisers and pesticides on our health is on a rise. Conventional agriculture relies heavily on chemical fertilisers and toxic pesticides etc., which enter the food supply, penetrate the water sources, harm the livestock, deplete the soil and devastate natural eco-systems. Efforts in evolving technologies which are eco-friendly are essential for sustainable development and one such technology which is eco-friendly is organic farming. In short, organic agriculture is a whole system of farming that restores, maintains and enhances the ecological balance. There is an increasing demand for organically grown food to enhance food safety throughout the world.

**Benefits of Organic Farming:** Organic agriculture offers a means to substitute costlier agricultural inputs (such as HYV seeds, chemical fertilisers, pesticides etc.) with locally produced organic inputs that are cheaper and thereby generate good returns on investment. Organic agriculture also generates income through exports as the demand for organically grown crops is on a rise. Studies across countries have shown that organically grown food has more nutritional value than chemical farming thus providing us with healthy foods. Since organic farming requires more labour input than conventional farming, India will find organic farming an attractive proposition. Finally, the produce is pesticide-free and produced in an environmentally sustainable way.

## Conclusion



It is clear that until and unless some spectacular changes occur, the rural sector might continue to remain backward. There is a greater need today to make rural areas more vibrant through diversification into dairying, poultry, fisheries, vegetables and fruits and linking up the rural production centres with the urban and foreign (export) markets to realise higher returns on the investments for the products. Moreover, infrastructure elements like credit and marketing, farmer-friendly agricultural policies and a constant appraisal and dialogue between farmers' groups and state agricultural departments are essential to realise the full potential of the sector.

Today we cannot look at the environment and rural development as two distinct subjects. There is need to invent or procure alternate sets of eco-friendly technologies that lead to sustainable development in different circumstances. From these, each rural community can choose whatever will suit its purpose. First of all, then, we need to learn from, and also try out when found relevant, practices from the available set of 'best practice' illustrations (which means success stories of rural development experiments that have already been carried out in similar conditions in different parts of India), to speed up this process of 'learning by doing'.

### Recap

Rural development is quite a comprehensive term but it essentially means a plan of action for the development of rural areas which are lagging behind in socio-economic development. There is a need for improving the quantity and quality of infrastructure in rural areas such as banking, marketing, storage, transport and communications etc. to realise its true potential. Diversification towards new areas such as livestock, fisheries and other non-agricultural activities is necessary not only to reduce the risk from agriculture sector but also to provide productive sustainable livelihood options to our rural people. The importance of organic farming as an environmentally sustainable production process is on a rise and needs to be promoted.

## Chapter 7 Employment: Growth, Informalisation And Other Issues

### Topic-4 Employment

**What is Employment**—Employment is an indicator of that situation in which worker is engaged in some productive activity for earning his living.

• **Labour Supply**—It refers to the amount of labour that are willing to offer corresponding to a particular wage rate. **Participation Rate** =  $\frac{\text{Total Work Force}}{\text{Total Size of Population}} \times 100$

• **Participation Rate**—Aggregate participation rate in India is approx. 39%. In Urban areas this rate is 36 percent while in rural it is approximately 40 percent.

• **Jobless Growth**—If economic growth is driven by better technology but it fails to improve the rate of participation in economy, such a growth is called 'Jobless Growth'.

**What is Unemployment**—Unemployment means a situation in which a person willing to work and able to work does not get employment at the prevailing wage rate.

• **Nature of unemployment in India**—In rural areas, open and disguised unemployment and in urban areas'

industrial, educated and technological unemployment are common.

### • Adverse Effects of Unemployment—(A)

**Economic Mal-effects**—(i) Waste of human power, (ii) Decrease in Economic Disparity, (iii) Industrial Conflict, (iv) Increase in poverty, (v) Adverse effect on capital formation. **(B) Social and Political effects**—(i) Creation of Social Problems, (ii) Exploitation of labour, (iii) High inequality, (iv) Political instability.

### • Causes of Unemployment in India—(A) General

**Causes**—(i) Rapid increase in population, (ii) Slow pace of development, (ii) Inadequate economic planning. **(B) Specific Causes**—(i) Seasonal Nature of Agriculture, (ii) Increase in Pressure of population, (iii) Shortage of Capital, (iv) Social Status, (v) Shortage of Secondary Education.

### • Measure to Eradicate Unemployment in India—

**General Measures:** (i) Control of population, (ii) Increase in investment rate, (iii) Manpower planning, (iv) Employment oriented planning, (v) Social reforms, (vi) Development of entrepreneurs qualities. **Specific Measures:** **(A) Rural Unemployment**—(i) Encouragement to rural industrialisation, (ii) Institution changes in agriculture, (iii) Employment oriented planning in villages, (iv) Encouragement to multiple cropping in agriculture. **(B) Urban Unemployment**—(i) Fuller utilisation of production capacity, (ii) Encouragement to small industries, (ii) Practical form of Education.

• Government Measures to solve unemployment—(A) General—(i) Population control, (ii) Reforms in education policy, (iii) Diversification of farm activities, (iv) Development of village and small industries. (B) Special Measures—Employment generation programmes, e.g., Mahatma Gandhi National Rural Employment Guarantee Act 2005.

### Workers and Employment

Those activities which contribute to the gross national product are called economic activities. All those who are engaged in economic activities, in whatever capacity — high or low, are workers. Even if some of them temporarily abstain from work due to illness, injury or other physical disability, bad weather, festivals, social or religious functions, they are also workers. Workers also include all those who help the main workers in these activities. We generally think of only those who are paid by an employer for their work as workers. This is not so. Those who are self-employed are also workers. The nature of employment in India is multifaceted. Some get employment throughout the year; some others get employed for only a few months in a year. Many workers do not get fair wages for their work. While estimating the number of workers, all those who are engaged in economic activities are included as employed. You might be interested in knowing the number of people actively engaged in various economic activities. During 1999-2000, India had about a 400 million strong workforce. Since majority of our people reside in rural areas, the proportion of workforce residing there is higher. The rural workers constitute about three-fourth of this 400 million. Men form the majority of workforce in India. About 70 per cent of the workers are men and the rest are women (men and women include child labourers in respective sexes). Women workers account for one-third of the rural workforce whereas in urban areas, they are just one-fifth of the workforce. Women carry out works like cooking, fetching water and fuelwood and participate in farm labour. They are not paid wages in cash or in the

form of grains; at times they are not paid at all. For this reason, these women are not categorised as workers. Economists have argued that these women should also be called workers.

### Participation of People in Employment

Worker-population ratio is an indicator which is used for analysing the employment situation in the country. This ratio is useful in knowing the proportion of population that is actively contributing to the production of goods and services of a country. If the ratio is higher, it means that the engagement of people is greater; if the ratio for a country is medium, or low, it means that a very high proportion of its population is not involved directly in economic activities.

If you want to know the worker-population ratio for India, divide the total number of workers in India by the population in India and multiply it by 100, you will get the worker-population ratio for India.

#### Worker-Population Ratio in India, 1999-2000

Sex	Worker	Population	Ratio
	Total	Rural	Urban
Men	52.7	53.1	51.8
Women	25.4	29.9	13.9
Total	39.5	41.7	33.7

If you look at Table it shows the different levels of participation of people in economic activities. For every 100 persons, about 40 (by rounding off 39.5) are workers in India. In urban areas, the proportion is about 34 whereas in rural India, the ratio is about 42. Why is there such a difference? People in rural areas have limited resources to earn a higher income and participate more in the employment market. Many do not go to schools, colleges and other training institutions. Even if some go, they discontinue in the middle to join the workforce; whereas, in urban areas, a considerable section is able to study in various educational institutions. Urban people have a variety of employment opportunities. They look for the appropriate job to suit their qualifications and skills. In rural areas, people cannot stay at home as their economic condition may not allow them to do so. Compared to females, more males are found to be working. The difference in participation rates is very large in urban areas: for every 100 urban females, only about 14 are engaged in some economic activities. In rural areas, for every 100 rural women about 30 participate in the employment market. Why are women, in general, and urban women, in particular, not working? It is common to find that where men are able to earn high incomes, families discourage female members from taking up jobs.

Going back to what has already been mentioned above, many activities for the household engaged in by women are not recognised as productive work. This narrow definition of work leads to non-recognition of women's work and, therefore, to the underestimation of the number of women workers in the country. Think of the women actively engaged in many activities within the house and at family farms who are not paid for such work. As they certainly contribute to the maintenance of the household and farms, do you think that their number should be added to the number of women workers?

### Self-employed and Hired Workers

**Types of Labour—**(i) **Self-Employed Labour**—An arrangement in which a worker uses his own resources to make a living is known as self-employed. He owns and operates an enterprise to earn his livelihood. (ii) **Hired-Workers**—Those people who are hired by

others on paid wages or salaries as a reward for their services are called hired workers. Hired workers can be of two types: (a) **Casual Workers**—Those people who are not hired by their employers on a regular or permanent basis and do not get social security benefits are called casual workers. (b) **Regular Workers**—This type of workers are hired on permanent basis by the employer.

### Employment in Firms, Factories and Offices

In the course of economic development of a country, labour flows from agriculture and other related activities to industry and services. In this process, workers migrate from rural to urban areas. Eventually, at a much later stage, the industrial sector begins to lose its share of total employment as the service sector enters a period of rapid expansion. This shift can be understood by looking at the distribution of workers by industry.

Generally, we divide all economic activities into eight different industrial divisions. They are (i) Agriculture (ii) Mining and Quarrying (iii) Manufacturing (iv) Electricity, Gas and Water Supply (v) Construction (vi) Trade (vii) Transport and Storage and (viii) Services. For simplicity, all the working persons engaged in these divisions can be clubbed into three major sectors viz. (a) primary sector which includes (i) and (ii) (b) secondary sector which includes (iii), (iv) and (v) and (c) service sector which includes divisions (vi), (vii) and (viii). Table 7.2 shows the distribution of working persons in different industries during the year 1999-2000.

Primary sector is the main source of employment for majority of workers in India. Secondary sector provides employment to only about 16 per cent of workforce. About 24 per cent of workers are in the service sector. Table also shows that more than three-fourth of the workforce in rural India depends on agriculture and mining and quarrying. About 10 per cent of rural workers are working in manufacturing industries, construction and other divisions. Service sector provides employment to only about 13 per cent of rural workers. Agriculture and mining is not a major source of employment in urban areas where people are mainly engaged in the service sector. About 60 per cent of urban workers are in the service sector. The secondary sector gives employment to about 30 per cent of urban workforce.

#### Distribution of Workforce by Industry, 1999-2000 (in %)

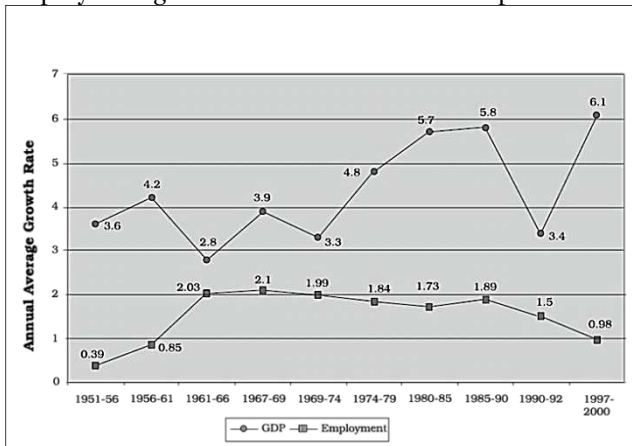
Industrial Category	Place of Residence		Sex		Total
	Rural	Urban	Male	Female	
Primary sector	76.7	9.6	53.8	75.1	60.4
Secondary Sector	10.8	31.3	17.6	11.8	15.8
Tertiary / Service Sector	12.5	59.1	28.6	13.1	23.8
Total	100.0	100.0	100.0	100.0	100.0

Though both men and women workers are concentrated in the primary sector, women workers' concentration is very high there. More than three-fourth of the female workforce is employed in the primary sector whereas only half of males work in that sector. Men get opportunities in both secondary and service sectors.

### Growth and Changing Structure of Employment

In Chapters 2 and 3, you might have studied about the planning strategies in detail. Here we will look at two developmental indicators — growth of employment and

GDP. Fifty years of planned development have been aimed at expansion of the economy through increase in national product and employment. During the period 1960–2000, Gross Domestic Product (GDP) of India grew positively and was higher than the employment growth. However, there was always fluctuation in the growth of GDP. During this period, employment grew at a stable rate of about 2 per cent.



*Growth of Employment and Gross Domestic Product, 1951–2000*

Above Chart also points at another disheartening development in the late 1990s: employment growth started declining and reached the level of growth that India had in the early stages of planning. During these years, we also find a widening gap between the growth of GDP and employment. This means that in the Indian economy, without generating employment, we have been able to produce more goods and services. Scholars refer to this phenomenon as jobless growth.

So far we have seen how employment has grown in comparison to GDP. Now it is necessary to know how the growth pattern of employment and GDP affected different sections of workforce. From this we will also be able to understand what types of employment are generated in our country.

Let us look at two indicators that we have seen in the preceding sections — employment of people in various industries and their status. We know that India is an agrarian nation; a major section of population lives in rural areas and is dependent on agriculture as their main livelihood. Developmental strategies in many countries, including India, have aimed at reducing the proportion of people depending on agriculture.

Distribution of workforce by industrial sectors shows substantial shift from farm work to non-farm work (see Table 7.3). In 1972–73, about 74 per cent of workforce was engaged in primary sector and in 1999–2000, this proportion has declined to 60 per cent. Secondary and service sectors are showing promising future for the Indian workforce. You may notice that the shares of these sectors have increased from 11 to 16 per cent and 15 to 24 per cent respectively.

The distribution of workforce in different status indicates that over the last three decades (1972–2000), people have moved from self-employment and regular salaried employment to casual wage work. Yet self-employment continues to be the major employment provider. Scholars call this process of moving from self-employment and regular salaried employment to casual wage work as casualisation of workforce. This makes the workers highly vulnerable. How? Look at the case study of Ahmedabad in the preceding section.

### Informalisation of Indian Workforce

In the previous section we have found that the proportion of casual labourers has been increasing. One of the objectives of development planning in India, since India's independence, has been to provide decent livelihood to its people. It has been envisaged that the industrialisation strategy would bring surplus workers from agriculture to industry with better standard of living as in developed countries. We have seen in the preceding section, that even after 55 years of planned development, three-fifth of Indian workforce depends on farming as the major source of livelihood.

*Trends in Employment Pattern (Sector-wise and Status-wise), 1972–2000 (in %)*

Item	1972-73	1983	1993-94	1999-2000
<b>Sector</b>				
Primary	74.3	68.6	64	60.4
Secondary	10.9	11.5	16	15.8
Services	14.8	16.9	20	23.8
Total	100.0	100.0	100.0	100.0
<b>Status</b>				
Self employed	61.4	57.3	54.6	52.6
Regular Salaried Employees	15.4	13.8	13.6	14.6
Casual Wage Labourers	23.2	28.9	31.8	32.8
Total	100.0	100.0	100.0	100.0

Economists argue that, over the years, the quality of employment has been deteriorating. Even after working for more than 10–20 years, why do some workers not get maternity benefit, provident fund, gratuity and pension? Why does a person working in the private sector get a lower salary as compared to another person doing the same work but in the public sector?

You may find that a small section of Indian workforce is getting regular income. The government, through its labour laws, enable them to protect their rights in various ways. This section of the workforce forms trade unions, bargains with employers for better wages and other social security measures. Who are they? To know this we classify workforce into two categories: workers in formal and informal sectors, which are also referred to as organised and unorganised sectors. All the public sector establishments and those private sector establishments which employ 10 hired workers or more are called formal sector establishments and those who work in such establishments are formal sector workers. All other enterprises and workers working in those enterprises form the informal sector. Thus, informal sector includes millions of farmers, agricultural labourers, owners of small enterprises and people working in those enterprises as also the self-employed who do not have any hired workers. It also includes all non-farm casual wage labourers who work for more than one employer such as construction workers and headload workers.

Those who are working in the formal sector enjoy social security benefits. They earn more than those in the informal sector. Developmental planning envisaged that as the economy grows, more and more workers would become formal sector workers and the proportion of workers engaged in the informal sector would dwindle. But what has happened in India? There are about 400 million workers in the country. There are about 28 million workers in the formal sector as per above chart. Can you estimate the percentage of people employed in the formal sectors in the country? About seven per cent ( $28/400 \times 100$ ). Thus, the rest 93 per cent are in the



informal sector. Out of 28 million formal sector workers, only 4.8 million, that is, only 17 per cent ( $4.8/28 \times 100$ ) are women. In the informal sector, male workers account for 69 per cent of the workforce.

Since the late 1970s, many developing countries, including India, started paying attention to enterprises and workers in the informal sector as employment in the formal sector is not growing. Workers and enterprises in the informal sector do not get regular income; they do not have any protection or regulation from the government. Workers are dismissed without any compensation. Technology used in the informal sector enterprises is outdated; they also do not maintain any accounts. Workers of this sector live in slums and are squatters.

Of late, owing to the efforts of the International Labour Organisation (ILO), the Indian government has initiated the modernisation of informal sector enterprises and provision of social security measures to informal sector workers.

## Unemployment

**What is Unemployment**—Unemployment means a situation in which a person willing to work and able to work does not get employment at the prevailing wage rate.

Do we have different types of unemployment in our economy? The situation described in the first paragraph of this section is called open unemployment.

Economists call unemployment prevailing in Indian farms as disguised unemployment. What is disguised unemployment? Suppose a farmer has four acres of land and he actually needs only two workers and himself to carry out various operations on his farm in a year, but if he employs five workers and his family members such as his wife and children, this situation is known as disguised unemployment. One study conducted in the late 1950s showed about one-third of agriculture workers in India as disguisedly unemployed.

You may have noticed that many people migrate to an urban area, pick up a job and stay there for some time, but come back to their home villages as soon as the rainy season begins. Why do they do so? This is because work in agriculture is seasonal; there are no employment opportunities in the village for all months in the year. When there is no work to do on farms, people go to urban areas and look for jobs. This kind of unemployment is known as seasonal unemployment. This is also a common form of unemployment prevailing in India.

Though we have witnessed slow growth of employment, have you seen people being unemployed over a very long time? Scholars say that in India, people cannot remain completely unemployed for very long because their desperate economic condition would not allow them to be so. You will rather find them being forced to accept jobs that nobody else would do, unpleasant or even dangerous jobs in unclean, unhealthy surroundings. The central and state governments take many initiatives and generate employment to facilitate a decent living for low income families through various measures. These will be discussed in the following section.

## Government and Employment Generation

Recently the government passed an Act in Parliament known as the National Rural Employment Guarantee Act 2005. It promises 100 days of guaranteed wage employment to all rural households who volunteer to do

unskilled manual work. This scheme is one of the many measures governments implement to generate employment for those who are in need of jobs in rural areas.

Since independence, the Union and state governments have played an important role in generating employment or creating opportunities for employment generation. Their efforts can be broadly categorised into two — direct and indirect. In the first category, as you have seen in the preceding section, government employs people in various departments for administrative purposes. It also runs industries, hotels and transport companies and hence provides employment directly to workers. When output of goods and services from government enterprises increases, then private enterprises which receive raw materials from government enterprises will also raise their output and hence increase the number of employment opportunities in the economy. For example, when a government owned steel company increases its output, it will result in direct increase in employment in that government company. Simultaneously, private companies, which purchase steel from it, will also increase their output and thus employment. This is the indirect generation of employment opportunities by the government initiatives in the economy.

In previous chapters, you would have noticed that many programmes that the governments implement, aimed at alleviating poverty, are through employment generation. They are also known as employment generation programmes. All these programmes aim at providing not only employment but also services in areas such as primary health, primary education, rural drinking water, nutrition, assistance for people to buy income and employment generating assets, development of community assets by generating wage employment, construction of houses and sanitation, assistance for constructing houses, laying of rural roads, development of wastelands/degraded lands.

## Conclusion

There has been a change in the structure of workforce in India. Newly emerging jobs are found mostly in the service sector. The expansion of the service sector and the advent of high technology now frequently permit a highly competitive existence for efficient small scale and often individual enterprises or specialist workers side by side with the multinationals. Outsourcing of work is becoming a common practice. It means that a big firm finds it profitable to close down some of its specialist departments (for example, legal or computer programming or customer service sections) and hand over a large number of small piecemeal jobs to very small enterprises or specialist individuals, sometimes situated even in other countries. The traditional notion of the modern factory or office, as a result, has been altering in such a manner that for many the home is becoming the workplace. All of this change has not gone in favour of the individual worker. The nature of employment has become more informal with only limited availability of social security measures to the workers.

In the last two decades, there has been rapid growth in the gross domestic product, but without simultaneous increase in employment opportunities. This has forced the government to take up initiatives in generating employment opportunities particularly in the rural areas.

## Recap

All those persons who are engaged in various economic activities and hence contribute to gross national product are workers. About two-fifth of the total population in the country is engaged in various economic activities. Men particularly rural men, form the major section of workforce in India. Majority of workers in India are self-employed. Casual wage labourers and regular salaried employees together account for less than half the proportion of India's workforce. About three-fifth of India's workforce depends on agriculture and other allied activities as the major source of livelihood. In recent years, the growth of employment has decelerated. During post-reform period, India has been witness to employment opportunities in the service sector. These new jobs are found mostly in the informal sector and the nature of jobs is also mostly casual. Government is the major formal sector employer in the country. Disguised unemployment is a common form of unemployment in rural India. There has been a change in the structure of the workforce in India. Through various schemes and policies, the government takes initiatives to generate employment directly and indirectly.

## Chapter 8 Infrastructure

### Topic-5 Infrastructure

Infrastructure increases the productivity of productive resources and raises the standard of living and economic development of the country. All those factors like-energy, transport, communication, school, college and hospitals etc. which are the basis of economic and social development of human are termed as infrastructure. India invests only 34 percent of its GDP in Infrastructure.

- **Concept of Infrastructure**—Infrastructure refers to the basic supporting structure which is built to provide different kinds of success in an economy. These services include roads, railways, ports, airports, dams, power stations oil and gas pipelines, telecommunication facilities, schools and colleges, health system including clean drinking water facilities, banks, insurance and other financial institutions.

- **Types of Infrastructure (i) Economic Infrastructure**—It refers to all such elements of economic change (like power, transport, communication and monetary system) which serve as a support system to the process of economic growth. **(ii) Social Infrastructure**—It refers to all such elements which help in human capital formation, e.g., health, education, housing, etc.

- **Importance of Infrastructure in economic development**—(i) Raises productivity, (ii) Provides employment, (iii) Induced foreign investment, (iv) Enhances ability to work, (v) Facilitates outsourcing, (vi) Raises size of market, (vii) Raises economic development.

**Sources of Energy — (i) Conventional Sources (a)**

**Commercial Sources**—Coal, petroleum, electricity, etc. are used for commercial purposes. **(b) Non-**

**commercial Sources**—These are obtained from the nature and firewood, agriculture waste, cow dung, etc. are its example. **(ii) Non-conventional Sources of**

**Energy**—These are renewable sources like –Wind energy, solar energy, tidal energy, bio-gas, etc.

**Consumption Pattern of Commercial Energy — (i)** Presently 74 percent of total energy is consumed

commercially. **(ii)** Coal has highest share upto 54 percent, oil 32 percent, 10 percent natural gas and 2 percent hydro-energy. **(iii)** Non-commercial energy account for 26 percent to total energy.

Sector	1953-54	1970-71	1990-91	1996-97
Household	10	12	12	12
Agriculture	01	03	08	09
Industries	40	50	45	42
Transport	44	28	22	22
Others	5	07	13	15
Total	100	100	100	100

**Some challenges in Power Sector:** **(i)** To meet growing demand for electricity, India's Commercial energy supply needs to grow at about 7% **(ii)** Increased losses of State Electricity Boards. **(iii)** Private sector power generators are yet to play their role in a major way. **(iv)** General Public unrest due to high power tariffs and prolonged power cuts in different parts of the country. **(v)** Shortage of raw material and coal supplies to thermal power plants.

**Measure to cope with challenges:** **(i)** More public expenditure, **(ii)** Better research and development, **(iii)** Technological Innovation, **(iv)** Use of renewable energy sources

### Health

Development of health infrastructure ensures a country of healthy manpower for production of goods and services. In recent times, scholars argue that people are entitled to health care facilities. It is the responsibility of the government to ensure the right to healthy living. Health infrastructure includes hospitals, doctors, nurses and other para-medical professionals, beds, equipment required in hospitals and a well-developed pharmaceutical industry. It is also true that mere presence of health infrastructure is not sufficient to have healthy people: the same should be accessible to all the people. Since, the initial stages of planned development, policy-makers envisaged that no individual should fail to secure medical care, curative and preventive, because of the inability to pay for it. But are we able to achieve this vision? Before we discuss various health infrastructure, let us discuss the status of health in India.

**State of Health Infrastructure:** Over the years, India has built up a vast health infrastructure and manpower at different levels. At the village level, a variety of hospitals technically known as Primary Health Centres (PHCs) have been set up by the government.

#### Health System in India

*India's health infrastructure and health care is made up of a three-tier system —primary, secondary and tertiary. In order to provide primary health care, hospitals have been set up in villages and small towns which are generally manned by a single doctor, a nurse and a limited quantity of medicines. They are known as Primary Health Centres (PHC), Community Health Centres (CHC) and sub-centres. Auxiliary Nursing Midwife (ANM) is the first person who provides primary healthcare in rural areas.*

*When the condition of a patient is not managed by PHCs, they are referred to secondary or tertiary hospitals. They are mostly located in district headquarters and in big towns. All those hospitals which have advanced level equipment and medicines and undertake all the complicated health problems, which could not be managed by primary and secondary hospitals, come under the tertiary sector.*

*The tertiary sector also includes many premier institutes which not only impart quality medical education and*

conduct research but also provide specialised health care. Some of them are — All India Institute of Medical Science, New Delhi; Post Graduate Institute, Chandigarh; Jawaharlal Institute of Postgraduate Medical Education and Research, Pondicherry; National Institute of Mental Health and Neuro Sciences, Bangalore and All India Institute of Hygiene and Public Health, Kolkata.

India also has a large number of hospitals run by voluntary agencies and the private sector. These hospitals are manned by professionals and para-medical professionals trained in medical, pharmacy and nursing colleges.

**Private Sector Health Infrastructure:** In recent times, while the public health sector has not been so successful in delivering the goods about which we will study more in the next section, private sector has grown by leaps and bounds. More than 70 per cent of the hospitals in India are run by the private sector. In recent times, private sector has been playing a dominant role in medical education and training, medical technology and diagnostics, manufacture and sale of pharmaceuticals, hospital construction and the provision of medical services. Scholars point out that the private sector in India has grown independently without any major regulation; some private practitioners are not even registered doctors and are known as quacks.

**Medical Tourism —** A great opportunity: You might have seen and heard on TV news or read in newspapers about foreigners flocking to India for surgeries, liver transplants, dental and even cosmetic care. Why? Because our health services combine latest medical technologies with qualified professionals and is cheaper for foreigners as compared to costs of similar health care services in their own countries. In the year 2004-05, as many as 1,50,000 foreigners visited India for medical treatment. And this figure is likely to increase by 15 per cent each year. Experts predict that by 2012 India could earn more than 100 billion rupees through such 'medical tourism'. Health infrastructure can be upgraded to attract more foreigners to India.

**Indian Systems of Medicine (ISM):** It includes six systems—Ayurveda, Yoga, Unani, Siddha, Naturopathy and Homeopathy (AYUSH). But little has been done to set up a framework to standardise education or to promote research. ISM has huge potential and can solve a large part of our health care problems because they are effective, safe and inexpensive.

**Indicators of Health and Health Infrastructure—A Critical Appraisal:** As pointed out earlier, the health status of a country can be assessed through indicators such as infant mortality and maternal mortality rates, life expectancy and nutrition levels, along with the incidence of communicable and non-communicable diseases. Some of the health indicators, and India's position, are given in Table.

*Indicators of Health in India in Comparison with other Countries (World Health Report 2005 and Economic Survey 2007-08)*

Indicators	India	China	USA	Srilanka
Infant Mortality Rate / 1,000 live births	68	30	2	8
Under - 5 mortality / 1,000 live-births	87	37	8	15
Birth by skilled attendants	43	97	99	97
Fully immunised	67	84	93	99
Health expenditure as %	1.4	5.8	15.6	3.7

of GDP

Government health spending to total government spending (%)	5	10	23.1	6
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Per capita spending in internal dollars

Scholars argue that there is greater scope for the role of government in the health sector. For instance, the table shows expenditure on health sector as 1.4 per cent of total GDP. This is abysmally low as compared to other countries, both developed and developing. One study points out that India has about 17 per cent of the world's population but it bears a frightening 20 per cent of the global burden of diseases (GBD). GBD is an indicator used by experts to gauge the number of people dying prematurely due to a particular disease as well as the number of years spent by them in a state of 'disability' owing to the disease.

In India, more than half of GBD is accounted for by communicable diseases such as diarrhoea, malaria and tuberculosis. Every year around five lakh children die of water-borne diseases. The danger of AIDS is also looming large. Malnutrition and inadequate supply of vaccines lead to the death of 2.2 million children every year.

**Urban-Rural and Poor-Rich Divide:** Though 70 per cent of India's population lives in rural areas, only one-fifth of its hospitals are located in rural areas. Rural India has only about half the number of dispensaries. Thus, people living in rural areas do not have sufficient medical infrastructure. This has led to differences in the health status of people. As far as hospitals are concerned, there are only 0.36 hospitals for every one lakh people in rural areas while urban areas have 3.6 hospitals for the same number of people. The PHCs located in rural areas do not offer even X-ray or blood testing facilities which, for a city dweller, constitutes basic healthcare. States like Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh are relatively lagging behind in health care facilities. In the rural areas, the percentage of people who have no access to proper care has risen from 15 in 1986 to 24 in 2003.

Villagers have no access to any specialised medical care like paediatrics, gynaecology, anaesthesia and obstetrics. Even though 165 recognised medical colleges produce 12,000 medical graduates every year, the shortage of doctors in rural areas persists. While one-fifth of these doctor graduates leave the country for better monetary prospects, many others opt for private hospitals which are mostly located in urban areas.

The poorest 20 per cent of Indians living in both urban and rural areas spend 12 per cent of their income on healthcare while the rich spend only 2 per cent. What happens when the poor fall sick? Many have to sell their land or even pledge their children to afford treatment. Since government-run hospitals do not provide sufficient facilities, the poor are driven to private hospitals which makes them indebted forever. Or else they opt to die.

**Women's Health:** Women constitute about half the total population in India. They suffer many disadvantages as compared to men in the areas of education, participation in economic activities and health care. The deterioration in the child sex ratio in the country from 945 in 1991 to 927, as revealed by the census of 2001, points to the growing incidence of female foeticide in the country. Close to 3,00,000 girls under the age of 15 are not only married but have



already borne children at least once. More than 50 per cent of married women between the age group of 15 and 49 have anaemia and nutritional anaemia caused by iron deficiency, which has contributed to 19 per cent of maternal deaths. Abortions are also a major cause of maternal morbidity and mortality in India.

Health is a vital public good and a basic human right. All citizens can get better health facilities if public health services are decentralised. Success in the long-term battle against diseases depends on education and efficient health infrastructure. It is, therefore, critical to create awareness on health and hygiene and provide efficient systems. The role of telecom and IT sectors cannot be neglected in this process. The effectiveness of healthcare programmes also rests on primary healthcare. The ultimate goal should be to help people move towards a better quality of life. There is a sharp divide between the urban and rural healthcare in India. If we continue to ignore this deepening divide, we run the risk of destabilising the socio-economic fabric of our country. In order to provide basic healthcare to all, accessibility and affordability need to be integrated in our basic health infrastructure.

## Chapter 9 Environment And Sustainable Development

### Topic-6 Sustainable Economic Development

- **Environment**—It means, at a particular place, surrounding or conditions in which our organism lives on operate.
- **Physical Environment**—This is also known as non-biological environment. It includes land, water, climate, mountains minerals and all other sources which nature provides to us as a free gift.
- **Biological Environment**—It is also called living environment. It includes human, animals, birds, plants and all micro organisms.
- **Functions and Role of Environment**—(i) It supplies resources, (ii) It sustains life, (iii) It assimilates waste and (iv) It enhances quality of life.
- **Causes of Environmental Degradation**—(i) Population Growth, (ii) Poverty, (iii) Agricultural Development, (iv) Industrialisation, (v) Transport Development, (vi) Urbanisation, (vii) Foreign indebtedness, (viii) Market failure.
- **Effects of Economic Development on Environment**—(i) Global warming, (ii) Depletion of Ozone layer, (iii) Environmental crisis, (iv) Rise in opportunity cost of negative environmental impacts, (v) Supply-Demand reversal of environment resources.
- **Challenges of India's Environment**—(i) Air Pollution, (ii) Water Pollution, (iii) Solid and hazardous waste, (iv) Deforestation, (v) Land degradation.
- **Sustainable Development**—Development that means the need of the present generation without compromising the ability of future generation to meet their own needs is called sustainable development.
- **Objectives of Sustainable Development**—(i) To increase economic growth, (ii) To meet basic needs, (iii) To improve quality of life, (iv) To maximise the net benefits of future generations.
- **Strategies to Achieve Sustainable Development**—(i) Use of Non-conventional sources of energy, (ii) LPG & Gobar gas in rural areas. (iii) CNG in urban areas, (iv) Wind power (v) Solar power through photovoltaic cells,

(vi) Mini hydel plants, (vii) Bio-composting, (viii) Bio-pest control.

### Introduction

In the earlier chapters we have discussed the main economic issues faced by the Indian economy. The economic development that we have achieved so far has come at a very heavy price—at the cost of environmental quality. As we step into an era of globalisation that promises higher economic growth, we have to bear in mind the adverse consequences of the past development path on our environment and consciously choose a path of sustainable development. To understand the unsustainable path of development that we have taken and the challenges of sustainable development, we have to first understand the significance and contribution of environment to economic development. With this in mind, this chapter is divided into three sections. The first part deals with the functions and role of environment. The second section discusses the state of India's environment and the third section deals with steps and strategies to achieve sustainable development.

### Environment — Definition and Functions

Environment is defined as the total planetary inheritance and the totality of all resources. It includes all the biotic and abiotic factors that influence each other. While all living elements—the birds, animals and plants, forests, fisheries etc.—are biotic elements, abiotic elements include air, water, land etc. Rocks and sunlight are all examples of abiotic elements of the environment. A study of the environment then calls for a study of the inter-relationship between these biotic and abiotic components of the environment.

**Functions of the Environment:** The environment performs four vital functions (i) it supplies resources: resources here include both renewable and non-renewable resources. Renewable resources are those which can be used without the possibility of the resource becoming depleted or exhausted. That is, a continuous supply of the resource remains available. Examples of renewable resources are the trees in the forests and the fishes in the ocean. Non-renewable resources, on the other hand, are those which get exhausted with extraction and use, for example, fossil fuel (ii) it assimilates waste (iii) it sustains life by providing genetic and bio diversity and (iv) it also provides aesthetic services like scenery etc. The environment is able to perform these functions without any interruption as long as the demand on these functions is within its carrying capacity.

This implies that the resource extraction is not above the rate of regeneration of the resource and the wastes generated are within the assimilating capacity of the environment. When this is not so, the environment fails to perform its third and vital function of life sustenance and this results in an environmental crisis.

This is the situation today all over the world. The rising population of the developing countries and the affluent consumption and production standards of the developed world have placed a huge stress on the environment in terms of its first two functions. Many resources have become extinct and the wastes generated are beyond the absorptive capacity of the environment. Absorptive capacity means the ability of the environment to absorb degradation. The result — we are today at the threshold of environmental crisis. The past development has polluted and dried up rivers and other aquifers making water an economic good.

Besides, the intensive and extensive extraction of both renewable and non-renewable resources has exhausted some of these vital resources and we are compelled to spend huge amounts on technology and research to explore new resources. Added to these are the health costs of degraded environmental quality — decline in air and water quality (seventy per cent of water in India is polluted) have resulted in increased incidence of respiratory and water-borne diseases. Hence the expenditure on health is also rising

#### Box 9.1: Global Warming

*Global warming is a gradual increase in the average temperature of the earth's lower atmosphere as a result of the increase in greenhouse gases since the Industrial Revolution. Much of the recent observed and projected global warming is human-induced. It is caused by man-made increases in carbon dioxide and other greenhouse gases through the burning of fossil fuels and deforestation. Adding carbon dioxide, methane and such other gases (that have the potential to absorb heat) to the atmosphere with no other changes will make our planet's surface warmer. The atmospheric concentrations of carbon dioxide and CH<sub>4</sub> have increased by 31 per cent and 149 per cent respectively above pre-industrial levels since 1750. During the past century, the atmospheric temperature has risen by 1.1°F (0.6°C) and sea level has risen several inches. Some of the longer-term results of global warming are melting of polar ice with a resulting rise in sea level and coastal flooding; disruption of drinking water supplies dependent on snow melts; extinction of species as ecological niches disappear; more frequent tropical storms; and an increased incidence of tropical diseases. Among factors that may be contributing to global warming are the burning of coal and petroleum products (sources of carbon dioxide, methane, nitrous oxide, ozone); deforestation, which increases the amount of carbon dioxide in the atmosphere; methane gas released in animal waste; and increased cattle production, which contributes to deforestation, methane production, and use of fossil fuels. A UN Conference on Climate Change, held in Kyoto, Japan, in 1997, resulted in an international agreement to fight global warming which called for reductions in emissions of greenhouse gases by industrialised nations.*

**Source:** [www.wikipedia.org](http://www.wikipedia.org)

To make matters worse, global environmental issues such as global warming and ozone depletion also contribute to increased financial commitments for the government. Thus, it is clear that the opportunity costs of negative environmental impacts are high.

The biggest question that arises is: are environmental problems new to this century? If so, why? The answer to this question requires some elaboration. In the early days when civilisation just began, or before this phenomenal increase in population, and before countries took to industrialisation, the demand for environmental resources and services was much less than their supply. This meant that pollution was within the absorptive capacity of the environment and the rate of resource extraction was less than the rate of regeneration of these resources.

Hence environmental problems did not arise. But with population explosion and with the advent of industrial revolution to meet the growing needs of the expanding population, things changed. The result was that the demand for resources for both production and consumption went beyond the rate of regeneration of the resources; the pressure on the absorptive capacity

of the environment increased tremendously — this trend continues even today. Thus what has happened is a reversal of supply-demand relationship for environmental quality — we are now faced with increased demand for environmental resources and services but their supply is limited due to overuse and misuse. Hence the environmental issues of waste generation and pollution have become critical today.

#### Box 9.2: Ozone Depletion

*Ozone depletion refers to the phenomenon of reductions in the amount of ozone in the stratosphere. The problem of ozone depletion is caused by high levels of chlorine and bromine compounds in the stratosphere. The origins of these compounds are chlorofluorocarbons (CFC), used as cooling substances in air-conditioners and refrigerators, or as aerosol propellants, and bromofluorocarbons (halons), used in fire extinguishers. As a result of depletion of the ozone layer, more ultraviolet (UV) radiation comes to Earth and causes damage to living organisms. UV radiation seems responsible for skin cancer in humans; it also lowers production of phytoplankton and thus affects other aquatic organisms. It can also influence the growth of terrestrial plants. A reduction of approximately 5 per cent in the ozone layer was detected from 1979 to 1990. Since the ozone layer prevents most harmful wavelengths of ultraviolet light from passing through the Earth's atmosphere, observed and projected decreases in ozone have generated worldwide concern. This led to the adoption of the Montreal Protocol banning the use of chlorofluorocarbon (CFC) compounds, as well as other ozone depleting chemicals such as carbon tetrachloride, trichloroethane (also known as methyl chloroform), and bromine compounds known as halons.*

#### State of India's Environment

India has abundant natural resources in terms of rich quality of soil, hundreds of rivers and tributaries, lush green forests, plenty of mineral deposits beneath the land surface, vast stretch of the Indian Ocean, ranges of mountains, etc. The black soil of the Deccan Plateau is particularly suitable for cultivation of cotton, leading to concentration of textile industries in this region. The Indo-Gangetic plains — spread from the Arabian Sea to the Bay of Bengal — are one of the most fertile, intensively cultivated and densely populated regions in the world. India's forests, though unevenly distributed, provide green cover for a majority of its population and natural cover for its wildlife. Large deposits of iron-ore, coal and natural gas are found in the country. India alone accounts for nearly 20 per cent of the world's total iron-ore reserves. Bauxite, copper, chromate, diamonds, gold, lead, lignite, manganese, zinc, uranium, etc. are also available in different parts of the country. However, the developmental activities in India have resulted in pressure on its finite natural resources, besides creating impacts on human health and well-being. The threat to India's environment poses a dichotomy — threat of poverty-induced environmental degradation and, at the same time, threat of pollution from affluence and a rapidly growing industrial sector. Air pollution, water contamination, soil erosion, deforestation and wildlife extinction are some of the most pressing environmental concerns of India. The priority issues identified are (i) land degradation (ii) biodiversity loss (iii) air pollution with special reference to vehicular pollution in urban cities (iv) management of fresh water and (v) solid waste management. Land in India suffers from varying degrees and types of

degradation stemming mainly from unstable use and inappropriate management practices.

Some of the factors responsible for land degradation are (i) loss of vegetation occurring due to deforestation (ii) unsustainable fuel wood and fodder extraction (iii) shifting cultivation (iv) encroachment into forest lands (v) forest fires and over grazing (vi) non-adoption of adequate soil conservation measures (vii) improper crop rotation (viii) indiscriminate use of agro-chemicals such as fertilisers and pesticides (ix) improper planning and management of irrigation systems (x) extraction of ground water in excess of the recharge capacity (xi) open access resource and (xii) poverty of the agriculture-dependent people.

**Box. 9.3: Chipko or Appiko — What's in a Name?**

*You may be aware of the Chipko Movement, which aimed at protecting forests in the Himalayas. In Karnataka, a similar movement took a different name, 'Appiko', which means to hug. On 8 September 1983, when the felling of trees was started in Salkani forest in Sirsi district, 160 men, women and children hugged the trees and forced the woodcutters to leave. They kept vigil in the forest over the next six weeks. Only after the forest officials assured the volunteers that the trees will be cut scientifically and in accordance with the working plan of the district, did they leave the trees.*

*When commercial felling by contractors damaged a large number of natural forests, the idea of hugging the trees gave the people hope and confidence that they can protect the forests. On that particular incident, with the felling discontinued, the people saved 12,000 trees. Within months, this movement spread to many adjoining districts.*

*Indiscriminate felling of trees for fuelwood and for industrial use has led to many environmental problems. Twelve years after setting up of a paper mill in Uttar Kanara area, bamboo has been wiped out from that area. "Broad-leaved trees which protected the soil from the direct onslaught of rain have been removed, the soil washed away, and bare laterite soil left behind. Now nothing grows but a weed", says a farmer. Farmers also complain that rivers and rivulets dry up quicker, and that rainfall is becoming erratic. Diseases and insects earlier unknown are now attacking the crops.*

*Appiko volunteers want the contractors and forest officials to follow certain rules and restrictions. For instance, local people should be consulted when trees are marked for felling and trees within 100 metres of a water source and on a slope of 30 degrees or above should not be felled.*

*Do you know that the government allocates forestlands to industries to use forest materials as industrial raw material? Even if a paper mill employs 10,000 workers and a plywood factory employs 800 people but if they deprive the daily needs of a million people, is it acceptable? What do you think?*

**Source:** Excerpts from 'State of India's Environment 2: The Second Citizens' Report 1984-85', Centre for Science and Environment, 1996, New Delhi.

India supports approximately 17 per cent of the world's human and 20 per cent of livestock population on a mere 2.5 per cent of the world's geographical area. The high density of population and livestock and the competing uses of land for forestry, agriculture, pastures, human settlements and industries exert an enormous pressure on the country's finite land resources.

The per capita forest land in the country is only 0.08 hectare against the requirement of 0.47 hectare to meet

basic needs, resulting in an excess felling of about 15 million cubic metre forests over the permissible limit. Estimates of soil erosion show that soil is being eroded at a rate of 5.3 billion tonnes a year for the entire country as a result of which the country loses 0.8 million tonnes of nitrogen, 1.8 million tonnes of phosphorus and 26.3 million tonnes of potassium every year. According to the Government of India, the quantity of nutrients lost due to erosion each year ranges from 5.8 to 8.4 million tonnes.

In India, air pollution is widespread in urban areas where vehicles are the major contributors and in a few other areas which have a high concentration of industries and thermal power plants. Vehicular emissions are of particular concern since these are ground level sources and, thus, have the maximum impact on the general population. The number of motor vehicles has increased from about 3 lakh in 1951 to 67 crores in 2003. In 2003, personal transport vehicles (two-wheeled vehicles and cars only) constituted about 80 per cent of the total number of registered vehicles thus contributing significantly to total air pollution load. India is one of the ten most industrialised nations of the world. But this status has brought with it unwanted and unanticipated consequences such as unplanned urbanisation, pollution and the risk of accidents. The CPCB (Central Pollution Control Board) has identified seventeen categories of industries (large and medium scale) as significantly polluting.

**Box 9.4: Pollution Control Boards**

*In order to address two major environmental concerns in India, viz. water and air pollution, the government set up the Central Pollution Control Board (CPCB) in 1974. This was followed by states establishing their own state level boards to address all the environmental concerns. They investigate, collect and disseminate information relating to water, air and land pollution, lay down standards for sewage/trade effluent and emissions. These boards provide technical assistance to governments in promoting cleanliness of streams and wells by prevention, control and abatement of water pollution, and improve the quality of air and to prevent, control or abate air pollution in the country.*

*These boards also carry out and sponsor investigation and research relating to problems of water and air pollution and for their prevention, control or abatement. They also organise, through mass media, a comprehensive mass awareness programme for the same. The PCBs prepare manuals, codes and guidelines relating to treatment and disposal of sewage and trade effluents.*

*They assess the air quality through regulation of industries. In fact, state boards, through their district level officials, periodically inspect every industry under their jurisdiction to assess the adequacy of treatment measures provided to treat the effluent and gaseous emissions. It also provides background air quality data needed for industrial siting and town planning. The pollution control boards collect, collate and disseminate technical and statistical data relating to water pollution. They monitor the quality of water in 125 rivers (including the tributaries), wells, lakes, creeks, ponds, tanks, drains and canals.*

The above points highlight the challenges to India's environment. The various measures adopted by the Ministry of Environment and the central and state pollution control boards may not yield reward unless we consciously adopt a path of sustainable development. The concern for future generations alone can make



development last forever. Development to enhance our current living styles, without concern for posterity, will deplete resources and degrade environment at a pace that is bound to result in both environmental and economic crisis.

### Sustainable Development

Environment and economy are interdependent and need each other. Hence, development that ignores its repercussions on the environment will destroy the environment that sustains life forms. What is needed is sustainable development: development that will allow all future generations to have a potential average quality of life that is at least as high as that which is being enjoyed by the current generation. The concept of sustainable development was emphasised by the United Nations Conference on Environment and Development (UNCED), which defined it as: 'Development that meets the need of the present generation without compromising the ability of the future generation to meet their own needs'.

Read the definition again. You will notice that the term 'need' and the phrase 'future generations' in the definition are the catch phrases. The use of the concept 'needs' in the definition is linked to distribution of resources. The seminal report—Our Common Future—that gave the above definition explained sustainable development as 'meeting the basic needs of all and extending to all the opportunity to satisfy their aspirations for a better life'. Meeting the needs of all requires redistributing resources and is hence a moral issue.

Edward Barbier defined sustainable development as one which is directly concerned with increasing the material standard of living of the poor at the grass root level — this can be quantitatively measured in terms of increased income, real income, educational services, health care, sanitation, water supply etc. In more specific terms, sustainable development aims at decreasing the absolute poverty of the poor by providing lasting and secure livelihoods that minimise resource depletion, environmental degradation, cultural disruption and social instability. Sustainable development is, in this sense, a development that meets the basic needs of all, particularly the poor majority, for employment, food, energy, water, housing, and ensures growth of agriculture, manufacturing, power and services to meet these needs.

The Brundtland Commission emphasises on protecting the future generation. This is in line with the argument of the environmentalists who emphasise that we have a moral obligation to hand over the planet earth in good order to the future generation; that is, the present generation should bequeath a better environment to the future generation. At least we should leave to the next generation a stock of 'quality of life' assets no less than what we have inherited.

The present generation can promote development that enhances the natural and built environment in ways that are compatible with (i) conservation of natural assets (ii) preservation of the regenerative capacity of the world's natural ecological system (iii) avoiding the imposition of added costs or risks on future generations.

According to Herman Daly, a leading environmental economist, to achieve sustainable development, the following needs to be done (i) limiting the human population to a level within the carrying capacity of the environment. The carrying capacity of the environment is like a 'plimsoll line' of the ship which is its load limit mark. In the absence of the plimsoll line for the

economy, human scale grows beyond the carrying capacity of the earth and deviates from sustainable development (ii) technological progress should be input efficient and not input consuming (iii) renewable resources should be extracted on a sustainable basis, that is, rate of extraction should not exceed rate of regeneration (iv) for non-renewable resources rate of depletion should not exceed the rate of creation of renewable substitutes and (v) inefficiencies arising from pollution should be corrected.

### Strategies for Sustainable Development

**Use of Non-conventional Sources of Energy:** India, as you know, is hugely dependent on thermal and hydro power plants to meet its power needs. Both of these have adverse environmental impacts. Thermal power plants emit large quantities of carbon dioxide which is a green house gas. It also produces fly ash which, if not used properly, can cause pollution of water bodies, land and other components of the environment. Hydroelectric projects inundate forests and interfere with the natural flow of water in catchment areas and the river basins. Wind power and solar rays are good examples of conventional but cleaner and greener energy sources but are not yet been explored on a large scale due to lack of technological devices.

**LPG, Gobar Gas in Rural Areas:** Households in rural areas generally use wood, dung cake or other biomass as fuel. This practice has several adverse implications like deforestation, reduction in green cover, wastage of cattle dung and air pollution. To rectify the situation, subsidised LPG is being provided. In addition, gobar gas plants are being provided through easy loans and subsidy. As far as liquefied petroleum gas (LPG) is concerned, it is a clean fuel — it reduces household pollution to a large extent. Also, energy wastage is minimised. For the gobar gas plant to function, cattle dung is fed to the plant and gas is produced which is used as fuel while the slurry which is left over is a very good organic fertiliser and soil conditioner.

**CNG in Urban Areas:** In Delhi, the use of Compressed Natural Gas (CNG) as fuel in public transport system has significantly lowered air pollution and the air has become cleaner in the last few years.

**Wind Power:** In areas where speed of wind is usually high, wind mills can provide electricity without any adverse impact on the environment. Wind turbines move with the wind and electricity is generated. No doubt, the initial cost is high. But the benefits are such that the high cost gets easily absorbed.

**Solar Power through Photovoltaic Cells:** India is naturally endowed with a large quantity of solar energy in the form of sunlight. We use it in different ways. For example, we dry our clothes, grains, other agricultural products as well as various items made for daily use. We also use sunlight to warm ourselves in winter. Plants use solar energy to perform photosynthesis. Now, with the help of photovoltaic cells, solar energy can be converted into electricity. These cells use special kind of materials to capture solar energy and then convert the energy into electricity. This technology is extremely useful for remote areas and for places where supply of power through grid or power lines is either not possible or proves very costly. This technique is also totally free from pollution.

**Mini-hydel Plants:** In mountainous regions, streams can be found almost everywhere. A large percentage of such streams are perennial. Mini-hydel plants use the energy of such streams to move small turbines. The turbines generate electricity which can be used locally.

Such power plants are more or less environment-friendly as they do not change the land use pattern in areas where they are located; they generate enough power to meet local demands. This means that they can also do away with the need for large scale transmission towers and cables and avoid transmission loss.

**Traditional Knowledge and Practices:** Traditionally, Indian people have been close to their environment. They have been more a component of the environment and not its controller. If we look back at our agriculture system, healthcare system, housing, transport etc., we find that all practices have been environment friendly. Only recently have we drifted away from the traditional systems and caused large scale damage to the environment and also our rural heritage. Now, it is time to go back. One apt example is in healthcare. India is very much privileged to have about 15,000 species of plants which have medicinal properties. About 8,000 of these are in regular use in various systems of treatment including the folk tradition. With the sudden onslaught of the western system of treatment, we were ignoring our traditional systems such as Ayurveda, Unani, Tibetan and folk systems. These healthcare systems are in great demand again for treating chronic health problems. Now a days every cosmetic produce — hair oil, toothpaste, body lotion, face cream and what not — is herbal in composition. Not only are these products environment friendly, they are relatively free from side effects and do not involve large-scale industrial and chemical processing.

**Biocomposting:** In our quest to increase agricultural production during the last five decades or so, we almost totally neglected the use of compost and completely switched over to chemical fertilisers. The result is that large tracts of productive land have been adversely affected, water bodies including ground water system have suffered due to chemical contamination and demand for irrigation has been going up year after year. Farmers, in large numbers all over the country, have again started using compost made from organic wastes of different types. In certain parts of the country, cattle are maintained only because they produce dung which is an important fertiliser and soil conditioner. Earthworms can convert organic matter into compost faster than the normal composting process. This process is now being widely used. Indirectly, the civic authorities are benefited too as they have to dispose reduced quantity of waste.

**Biopest Control:** With the advent of green revolution, the entire country entered into a frenzy to use more and more chemical pesticides for higher yield. Soon, the adverse impacts began to show; food products were contaminated, soil, water bodies and even ground water were polluted with pesticides. Even milk, meat and fishes were found to be contaminated.

To meet this challenge, efforts are on to bring in better methods of pest control. One such step is the use of pesticides based on plant products. Neem trees are proving to be quite useful. Several types of pest controlling chemicals have been isolated from neem and these are being used. Mixed cropping and growing different crops in consecutive years on the same land have also helped farmers.

In addition, awareness is spreading about various animals and birds which help in controlling pests. For example, snakes are one of the prime group of animals which prey upon rats, mice and various other pests. Similarly, large varieties of birds, for example, owls and peacocks, prey upon vermin and pests. If these are

allowed to dwell around the agricultural areas, they can clear large varieties of pests including insects. Lizards are also important in this regard. We need to know their value and save them.

Sustainable development has become a catch phrase today. It is 'indeed' a paradigm shift in development thinking. Though it has been interpreted in a number of ways, adherence to this path ensures lasting development and non-declining welfare for all.

## Conclusion

Economic development, which aimed at increasing the production of goods and services to meet the needs of a rising population, puts greater pressure on the environment. In the initial stages of development, the demand for environmental resources was less than that of supply. Now the world is faced with increased demand for environmental resources but their supply is limited due to overuse and misuse. Sustainable development aims at promoting the kind of development that minimises environmental problems and meets the needs of the present generation without compromising the ability of the future generation to meet their own needs.

## Recap

Environment performs four functions: supplies resources, assimilates wastes, sustains life by providing genetic and bio diversity and provides aesthetic services.

Population explosion, affluent consumption and production have placed a huge stress on the environment.

Developmental activities in India have put immense pressure on its finite natural resources, besides creating impact on human health and well-being.

The threat to India's environment is of two dimensions—threat of poverty induced environmental degradation and the threat of pollution from affluence and a rapidly growing industrial sector.

Though the government, through various measures, attempts to safeguard the environment, it is also necessary to adopt a path of sustainable development. Sustainable development is development that meets the need of the present generation without compromising the ability of the future generation to meet their own needs.

Promotion of natural resources, conservation, preserving regenerative capacity of ecological system and avoiding the imposition of environmental risks on future generations would lead to sustainable development.

## Chapter 10 Development Experiences Of India: A Comparison With Neighbours

**Introduction:** India is geographically, the largest country in South Asia and seventh largest country in the world. It is second populous country after China in the world. An average growth rate of population was 2.2% per annum during the past decade but now it is 1.7%. Its total area is 32.9 lakh sq. kms and total present population is 130 crores. On the other hand, Pakistan extends from the Arabian Sea 1600 kms northward. It is a neighbouring state of India. Total area of Pakistan is 8.03 lakh sq. kms. Its population is 1/7th of India. Average growth rate of population is 2.4% per annum. China is located in Eastern Asia and it is the third largest country in the world in terms of total area. It has highest

population in the world with an annual population growth rate of nearly 0.66% per annum.

• **Developmental Path:** India, Pakistan and China have many common points in their plans for development. While India and Pakistan became independent nations in 1947 and the communist China came into existence in 1949, after a revolution. All these countries started their planning along similar lines. India announced its First Five Year Plan for 1951-56, Pakistan announced its Medium Term Development Plan in 1956. China announced its First Five Year Plan in 1953. Since 2013, Pakistan was working on the basis of 11th Five Year Development Plan, where as, China is working on 13th Five Year Plan (2016-21). Until March 2017, India has been following Five Year plan based development model.

• **Demographic Indicators:** India is a populous country just like China. These two countries together comprise one-third of the population of the world. As far as Pakistan is concerned, its population is much less around 10% when it is compared with China or India. The density of population in China is the lowest as compared to Pakistan and India. China has a low fertility rate but Pakistan has a high rate. Both these countries have high urbanisation rate. In India, this trend is slower (27.8%) as compared with Pakistan (33.4%) and China (36.1%).

• **Gross Domestic Product:** Economic development of a country can be judged through GDP growth rate. GDP growth rate explains the growing rate of valuable output of the country. Per capita income was 460 US dollars in India whereas it was 420 US dollars in Pakistan. Per capita GDP (PPP) in US Dollars was 3100 in India against 2200 in Pakistan. It means per capita income and GDP both were higher in India in comparison to Pakistan. Pakistan's GDP is roughly 12% of India's GDP and India's GDP is approx 40% of China's GDP. China has impressive growth rates in recent decade. China's growth rates have crossed 8 % per annum in recent years.

• **Indicators of Human Development:** The human Development Index is an important indicator. As far as human development indicator are concerned, China is ahead of India and Pakistan. Many indicators like the GDP per capita or proportion of population below poverty line or health indicators such as mortality rates, access to sanitation, literacy, life expectancy or malnourishment place China above the other two countries. Pakistan is ahead of India in reducing proportion of people below the poverty line. Its performance in access to water is better than that of India. So far as the proportion of people below the poverty line is concerned, situation in China is half as bad as in India and Pakistan.

• **Development Strategies: An Appraisal:** The development strategies of a country serve the purpose of a model to other countries. Other countries learn a lesson from the experience of a country and try to formulate their development programmes on that basis. It is necessary to understand the reasons behind the success or failure of a plan. Only then a neighbouring country should adopt a particular plan of action. A development strategy has various phases. These should be compared and contrasted for better assessment of the entire strategy. Structural Reforms in China were introduced in 1978 due to slow pace of growth and lack of modernisation. It was found that the establishment of infrastructure in the areas of education and health, land reforms, long existence of decentralised planning and

existence of small enterprises had helped positively in improving the social and income indicators in the post reform period. Scholars argue that in Pakistan the reform process led to worsening of all the economic indicators. However, during last few years, Pakistan has recovered its economic growth and has been sustaining.

### Development Strategies — an Appraisal

It is common to find developmental strategies of a country as a model to others for lessons and guidance for their own development. It is particularly evident after the introduction of the reform process in different parts of the world. In order to learn from economic performance of our neighbouring countries, it is necessary to have an understanding of the roots of their successes and failures. It is also necessary to distinguish between, and contrast, the different phases of their strategies. Though countries go through their development phases differently, let us take the initiation of reforms as a point of reference. We know that reforms were initiated in China in 1978, Pakistan in 1988 and India in 1991. Let us briefly assess their achievements and failures in pre and post reform periods.

Why did China introduce structural reforms in 1978? China did not have any compulsion to introduce reforms as dictated by the World Bank and International Monetary Fund to India and Pakistan. The new leadership at that time in China was not happy with the slow pace of growth and lack of modernisation in the Chinese economy under the Maoist rule. They felt that Maoist vision of economic development based on decentralisation, self sufficiency and shunning of foreign technology, goods and capital had failed. Despite extensive land reforms, collectivisation, the Great Leap Forward and other initiatives, the per capita grain output in 1978 was the same as it was in the mid-1950s. It was found that establishment of infrastructure in the areas of education and health, land reforms, long existence of decentralised planning and existence of small enterprises had helped positively in improving the social and income indicators in the post reform period. Before the introduction of reforms, there had already been massive extension of basic health services in rural areas. Through the commune system, there was more equitable distribution of food grains. Experts also point out that each reform measure was first implemented at a smaller level and then extended on a massive scale. The experimentation under decentralised government enabled to assess the economic, social and political costs of success or failure. For instance, when reforms were made in agriculture, as pointed out earlier by handing over plots of land to individuals for cultivation, it brought prosperity to a vast number of poor people. It created conditions for the subsequent phenomenal growth in rural industries and built up a strong support base for more reforms. Scholars quote many such examples on how reform measures led to rapid growth in China.

Scholars argue that in Pakistan the reform process led to worsening of all the economic indicators. We have seen in an earlier section that compared to 1980s, the growth rate of GDP and its sectoral constituents have fallen in the 1990s.

Countr y	Exports (Rs. in crores)			Imports (Rs. in crores)		
	2003	2004	Rate of	2003	2004	Rate
	-	-	Growt	-	-	of
	2004	2005		2004	2005	Growt



			h (%)			h (%)
Pakistan	1320	2270	72	265	430	60
China	1360	2060	52	1860	3030	60
	0	0		0	0	

Though the data on international poverty line for Pakistan is quite healthy, scholars using the official data of Pakistan indicate rising poverty there. The proportion of poor in 1960s was more than 40 per cent which declined to 25 per cent in 1980s and started rising again in 1990s. The reasons for the slow-down of growth and re-emergence of poverty in Pakistan's economy, as scholars put it, are agricultural growth and food supply situation were based not on an institutionalised process of technical change but on good harvest. When there was a good harvest, the economy was in good condition, when it was not, the economic indicators showed stagnation or negative trends. You will recall that India had to borrow from the IMF and World Bank to set right its balance of payments crisis; foreign exchange is an essential component for any country and it is important to know how it can be earned. If a country is able to build up its foreign exchange earnings by sustainable export of manufactured goods, it need not worry. In Pakistan most foreign exchange earnings came from remittances from Pakistani workers in the Middle-east and the exports of highly volatile agricultural products; there was also growing dependence on foreign loans on the one hand and increasing difficulty in paying back the loans on the other.

However, as stated in the 'One Year Performance of the (Pakistan) Government' for the year August 2004–2005, the Pakistan economy has been witnessing GDP growth at about 8 per cent for three consecutive years (2002–2005). All the three sectors, agriculture, manufacturing and service, have contributed to this trend. Besides facing high rates of inflation and rapid privatisation, the government is increasing the expenditure on various areas that can reduce poverty.

## Conclusion

What are we learning from the developmental experiences of our neighbours? India, China and Pakistan have travelled more than five decades of developmental path with varied results. Till the late 1970s, all of them were maintaining the same level of low development. The last three decades have taken these countries to different levels. India, with democratic institutions, performed moderately, but a majority of its people still depend on agriculture. Infrastructure is lacking in many parts of the country. It is yet to raise the level of living of more than one-fourth of its population that lives below the poverty line. Scholars are of the opinion that political instability, over-dependence on remittances and foreign aid along with volatile performance of agriculture sector are the reasons for the slowdown of the Pakistan economy. Yet, in the recent past, it is hoping to improve the situation by maintaining high rates of GDP growth. It was also a great challenge for Pakistan to recover from the devastating earthquake in 2005, which took the lives of nearly 75,000 people and also resulted in enormous loss to property. In China, the lack of political freedom and its implications for human rights are major concerns; yet, in the last three decades, it used the 'market system without losing political commitment' and succeeded in raising the level of growth along with alleviation of poverty. You will also notice that unlike India and

Pakistan, which are attempting to privatise their public sector enterprises, China has used the market mechanism to 'create additional social and economic opportunities'. By retaining collective ownership of land and allowing individuals to cultivate lands, China has ensured social security in rural areas. Public intervention in providing social infrastructure even prior to reforms has brought about positive results in human development indicators in China.

## Recap

With the unfolding of the globalisation process, developing countries are keen to understand the developmental processes pursued by their neighbours as they face competition from developed nations as also amongst themselves. India, Pakistan and China have similar physical endowments but totally different political systems. All the three countries follow the five-year plan pattern of development. However, the structures established to implement developmental policies are quite different. Till the early 1980s, the developmental indicators of all the three countries, such as growth rates and sectoral contribution towards national income, were similar. Reforms were introduced in 1978 in China, in 1988 in Pakistan and in 1991 in India. China introduced structural reforms on its own initiative while they were forced upon India and Pakistan by international agencies. The impact of policy measures were different in these countries — for instance, one-child norm has arrested the population growth in China whereas in India and Pakistan, a major change is yet to take place. Even after fifty years of planned development, majority of the workforce in all the countries depends on agriculture. The dependency is greater in India. Though China has followed the classical development pattern of gradual shift from agriculture to manufacturing and then to services, India and Pakistan's shift has been directly from agriculture to service sector. China's industrial sector has maintained a high growth rate while it is not so in both India and Pakistan. China is ahead of India and Pakistan on many human development indicators. However these improvements were attributed not to the reform process but the strategies that China adopted in the pre-reform period. While assessing the developmental indicators, one also has to consider the liberty indicators.